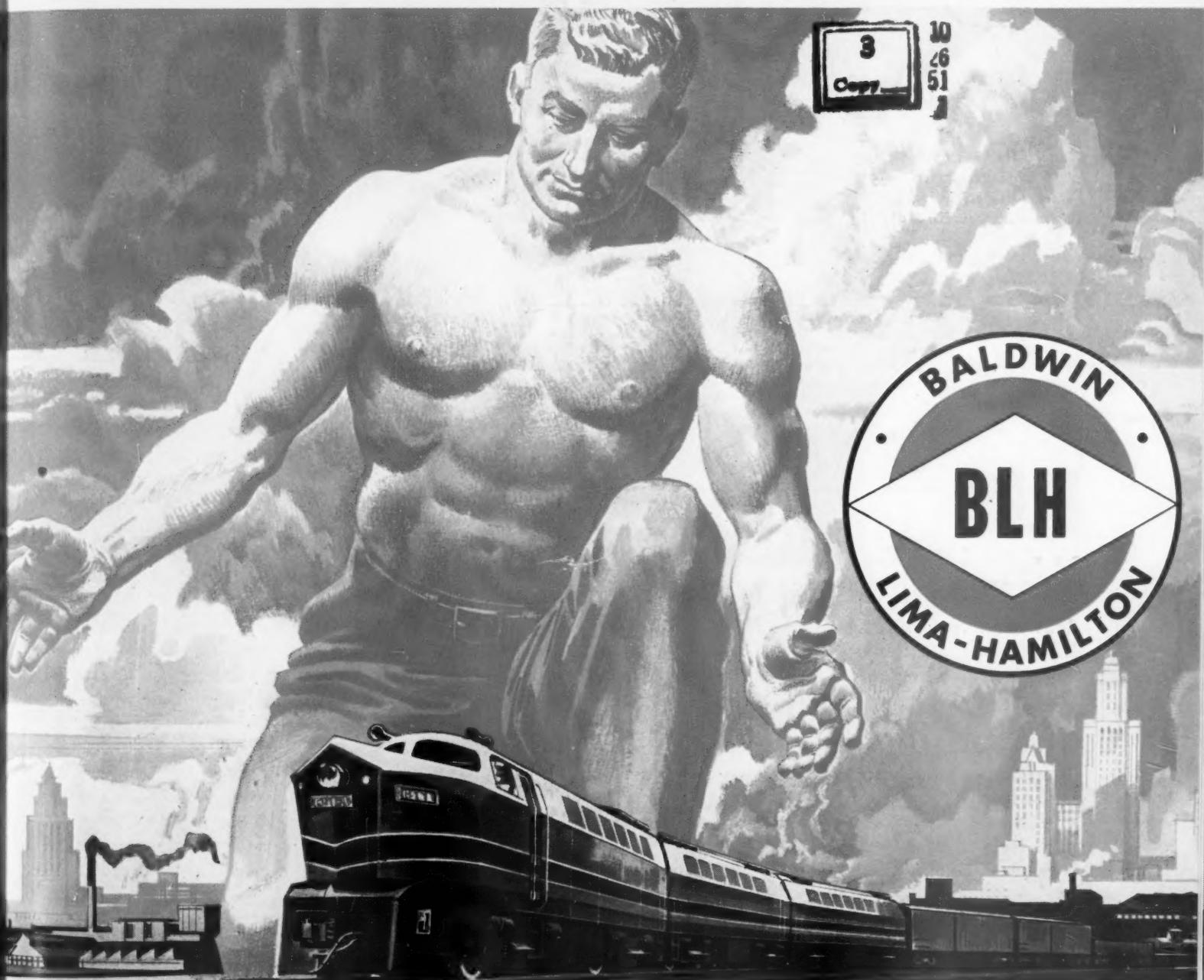


FOUNDED IN 1856

# RAILWAY AGE

THE STANDARD RAILROAD WEEKLY FOR ALMOST A CENTURY

JULY 30, 1951



## EXTRA Power for every assignment

From main-line freight locomotive to 800 hp switcher, each of the eight locomotives in this complete line is engineered to the exact needs of specific assignments... and every one provides extra power that means an extra margin of profitable performance.



**BALDWIN-Westinghouse** DIESEL-ELECTRIC LOCOMOTIVES



Texaco Diesel  
lubrication and service are  
available in all 48 states

## RAILROADS PREFER TEXACO

More railroad Diesel locomotives in the U. S. are  
lubricated with **TEXACO** than with any other brand.

Western Railway of Alabama lubricates its road  
Diesel locomotives with  
Texaco Dieseltex HD.



## DIESELS RUN CLEANER ...COSTS COME DOWN

### ...when you lubricate with **TEXACO DIESELTEx HD**

Run a Diesel locomotive lubricated with *Texaco Dieseltex HD* in your severest service. Run up, if you will, extra mileage between overhauls. Then note, when the engine is taken down, the clean top decks . . . the absence of harmful sludge, carbon and varnish. Note the free rings, the unhampered valve action, the slight amount of wear. These benefits mean lower maintenance costs and less fuel consumption.

*Texaco Dieseltex HD* is fully detergent and dispersive, made from an exclusive formula that embodies a special heavy-duty additive that greatly increases resistance to oxidation and sludge formation. *Texaco Dieseltex HD* meets the stringent requirements of leading Diesel locomotive builders.

### Two Other Texaco Cost-Savers

For year-round protection against hot boxes, use *Texaco Texayce Oil*. It more than meets the new A.A.R. all-year car oil specification . . . has proved itself through nearly a quarter century of service on leading railroads.

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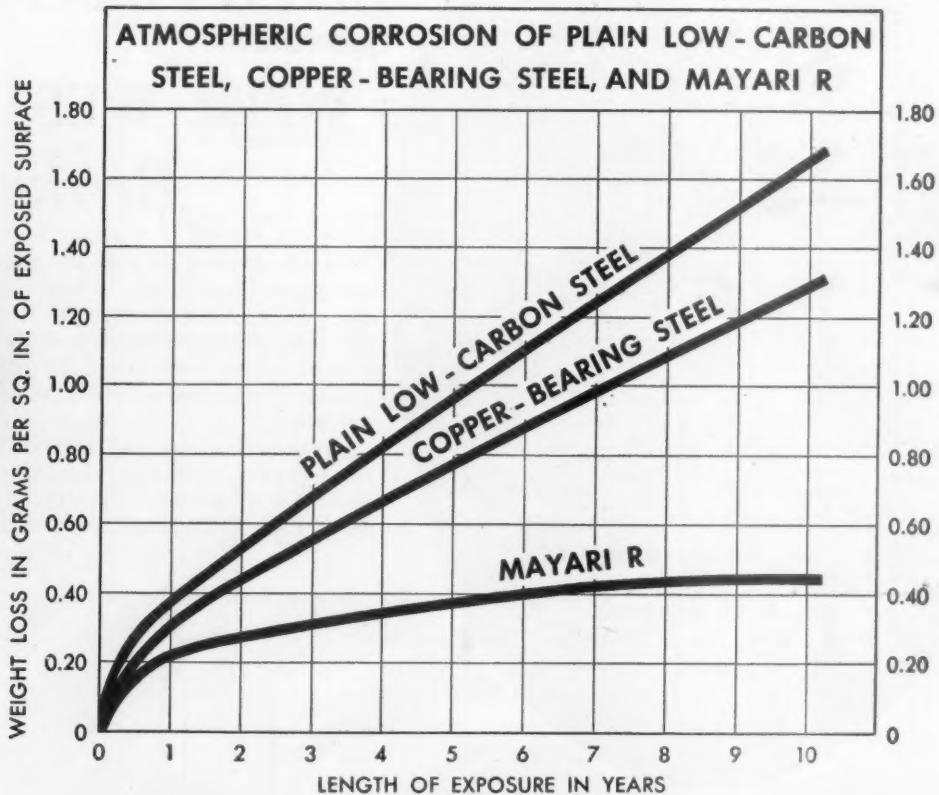
The Texas Company, Railway Sales Division, 135 East 42nd Street, New York 17, N. Y.

NEW YORK ★ CHICAGO ★ SAN FRANCISCO ★ ST. PAUL ★ ST. LOUIS ★ ATLANTA



**TEXACO Dieseltex HD**  
FOR ALL RAILROAD DIESELS

**10  
YEAR  
TEST**



## shows how **MAYARI R** resists atmospheric corrosion

The curves plotted on this chart show the weight losses, due to atmospheric corrosion, of plain low-carbon steel, copper-bearing steel, and Mayari R. These three types of steel were exposed for a 10-year period, under exactly the same conditions, in a highly corrosive industrial atmosphere.

Relatively little difference was found in the weight losses of the three steels in the initial period. However, as the test continued, the difference in the rates of corrosion changed appreciably. The Mayari R curve became almost horizontal, indicating that corrosion had practically stopped. The other two curves continued to rise sharply,

showing that corrosion continued unabated in both the carbon steel and copper-bearing steel.

It is important to note that after 10 years of exposure, Mayari R had lost no more weight than copper-bearing lost in 2 years, and no more than carbon steel lost in 1½ years.

The superior resistance to atmospheric corrosion shown by Mayari R is mainly due to the relatively thick and tightly adherent layer of rust that forms on the surface of this steel to protect it from further loss of weight.

This superior corrosion-resistance is one of the important reasons why Mayari R is now widely

used in railway cars, mine cars, bridges, industrial structures, coal silos, smoke stacks and countless other applications where long service life and low-cost maintenance are essential.

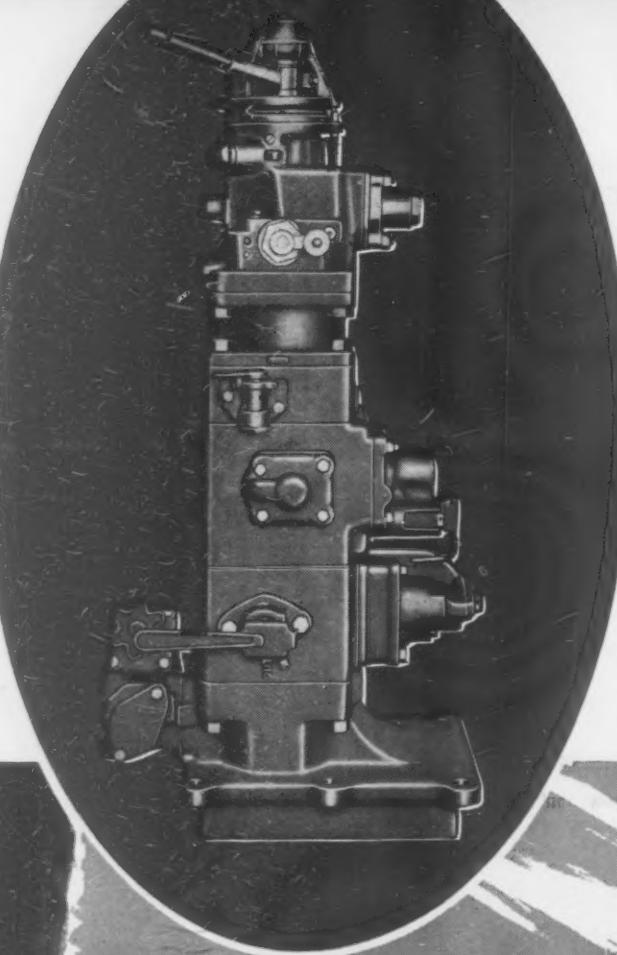
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*Smoother, Safer Journeys for  
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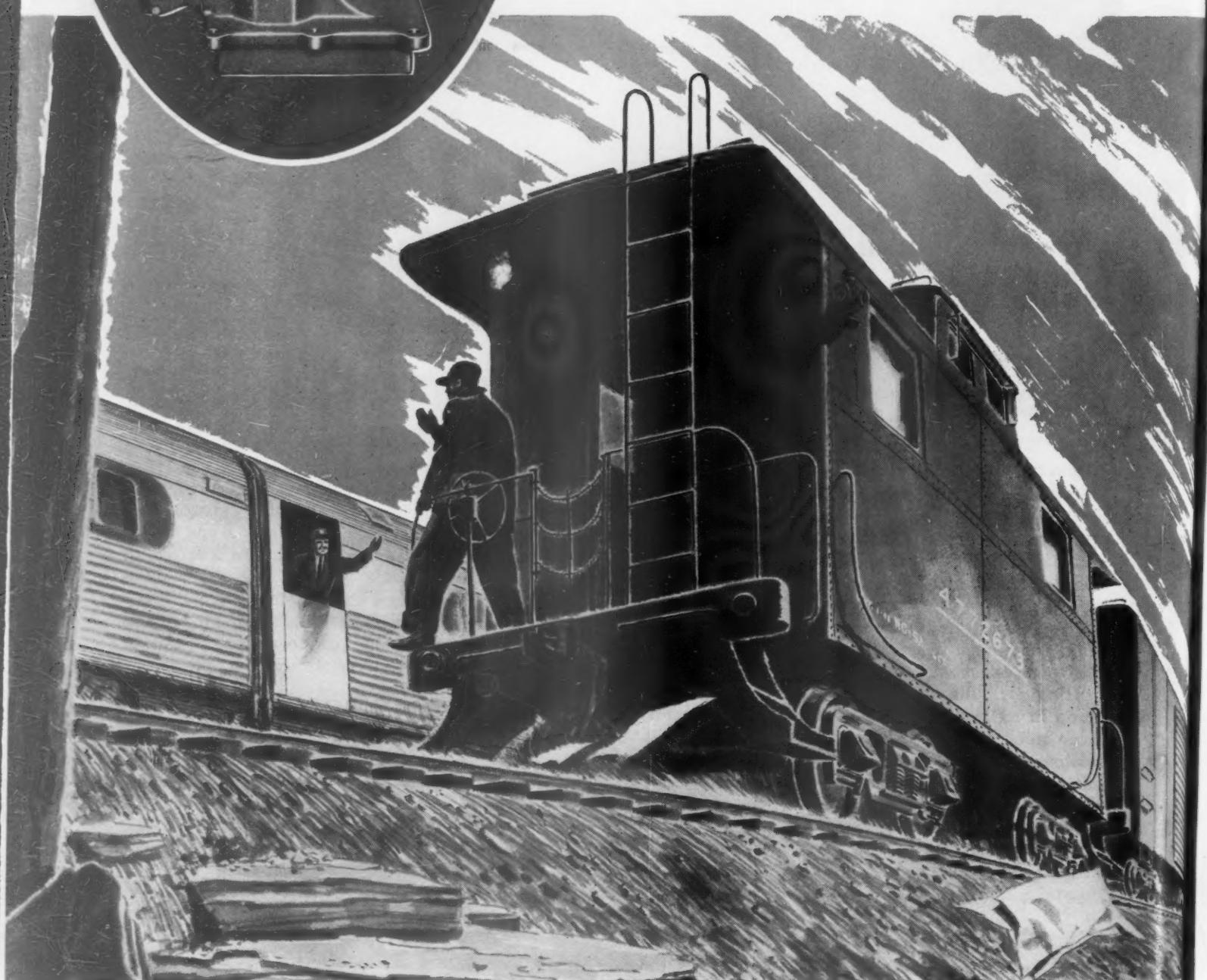
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Brake Equipment**

You might question that one equipment could handle the widely different problems involved in braking a speeding passenger train, and a long freight train. And you'd be right! *For the Westinghouse 24-RL isn't just one brake.*

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⌘ Westinghouse Air Brake Co.

WILMERTING, PA.



# RAILWAY AGE

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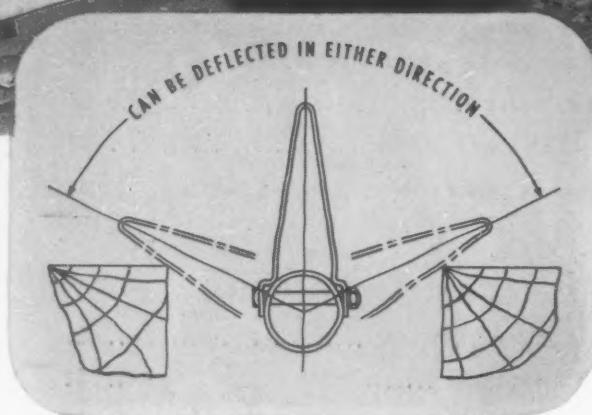
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At Low  
Cost!



SRD-5  
**"UNION"** SELF-RESTORING  
DRAGGING EQUIPMENT DETECTOR

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# WEEK AT A GLANCE

## CURRENT RAILWAY STATISTICS

Operating revenues, five months	
1951	\$ 4,180,123,254
1950	3,444,524,886
Operating expenses, five months	
1951	\$ 3,297,621,471
1950	2,765,378,614
Taxes, five months	
1951	\$ 476,980,422
1950	353,765,743
Net railway operating income, five months	
1951	\$ 321,485,648
1950	253,110,891
Net income, estimated, five months	
1951	\$ 197,000,000
1950	133,000,000
Average price railroad stocks	
July 24, 1951	52.72
July 25, 1950	46.37
Car loadings, revenue freight	
28 weeks, 1951	21,285,104
28 weeks, 1950	19,228,066
Average daily freight car surplus	
Week ended July 21, 1951	14,836
Week ended July 22, 1950	5,239
Average daily freight car shortage	
Week ended July 21, 1951	8,326
Week ended July 22, 1950	22,526
Freight cars delivered	
June 1951	9,644
June 1950	3,874
Freight cars on order	
July 1, 1951	147,725
July 1, 1950	40,585
Freight cars held for repairs	
July 1, 1951	93,866
July 1, 1950	123,115
Average freight car turn-around time, days	
June 1951	14.79
June 1950	14.60
Average number railroad employees	
Mid-June 1951	1,295,045
Mid-June 1950	1,240,998

## In This Issue . . .

**STREAMLINING TICKETS:** Not tomorrow, and probably not even next year — but eventually — the “mile-long” interline railroad ticket is likely to go the way of the diamond stack and the red plush daycoach seat — replaced probably by some form of coupon book. Experiments with such books, reactions to them, and a survey of their many good and few bad points are all covered in the article which begins on page 26.

**WHO KNOWS BEST?** Not so long ago, truck propagandists were citing Woodstock, Vt., as an example of a town that has gotten along without railroads. But judging from the editorial quoted on page 20, the Woodstockers aren't quite so happy about it. Who knows best?

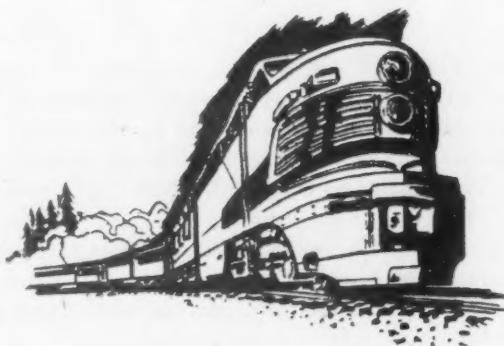
**GETTING RESULTS WITH DIESELS:** How the Santa Fe — a pioneer in the use of diesel-electric locomotives, and one of their present largest users — got results with them is outlined in the article starting on page 37. In it, J. P. Morris, general manager, mechanical, discusses both early difficulties and later successes.

**IN THE WEEK'S NEWS:** Omnibus transport bill introduced in Senate.—Railroad reports on Mid-Western flood developments.—Three Pullman-Standard plants closed by strikes.—Railroads set to handle record northwest grain crop.—Class I railroads install 254 locomotives in June.—Nineteen diesels ordered in U. S.; 11 in Canada.—C. N. buys 4,305 freight cars.—N. Y. C. to expand Syracuse yard facilities.—Nine more roads get amortization certificates.

**AND OTHERWISE:** A description of the British Railways' new standard passenger cars (page 29).—How the B. & O. helps to train Army railroad personnel (page 32), and uses Bendix radio to save train time on its F. M. & P. subdivision (page 36).—A description of the G. N.'s new car paint-spray shop, designed for employee comfort (page 34).—The U. P.'s campaign to reduce livestock loss and damage (page 41).

## In Washington . . .

**SANITY STILL REIGNS:** Somewhere, at least, sanity still reigns! The House Committee on Public Works has pigeonholed and apparently killed, for



## WEEK AT A GLANCE

this session anyway, legislation to authorize construction of the St. Lawrence iceway.

**RIPENING FRUIT . . .**: In the past year, Class I railroads have increased their supply of serviceable freight cars by about 40,000 units, according to C. S. D. Chairman A. H. Gass, whose latest report on the "National Transportation Situation" is summarized in the news (page 22). This, therefore, seems an auspicious moment to call attention to the fact that for eight consecutive weeks now — ever since the end of May — average daily car surpluses have far exceeded corresponding shortages. In all but one of those eight weeks shortages have been less than 10,000 cars. Surpluses, on the other hand, have exceeded 20,000 cars in six of the eight weeks. What lies ahead for the traditionally heavy-loading fall season remains, of course, to be seen. But the car buying and repairing program initiated by the railroads a year ago is certainly beginning to bear fruit.

**COULD BE BLIGHTED:** But the fruit of increased car supply could be badly blighted before it can be fully harvested — if corporate taxes are raised to a point which makes it difficult or impossible for the railroads to continue to finance still more cars, or the improved facilities needed to use cars with maximum efficiency. The danger of upsetting improvement programs which is inherent in any tax increase plan was forcibly presented to a Senate committee last week by A.A.R. Vice-President J. Carter Fort. His argument, reported on news page 21, pointed out, among other things, that railroads even now must earn \$1.90 to realize \$1 for capital expenditures.

**"OFF AGIN', ON AGIN', GONE AGIN'":** Or, in this case, back agin' — at the White House. That's where the N.M.B. has sent the wage-rules case involving enginemen, firemen and conductors after "unavailing" efforts to end the "deadlocked" negotiations. Details are reported in the news pages.



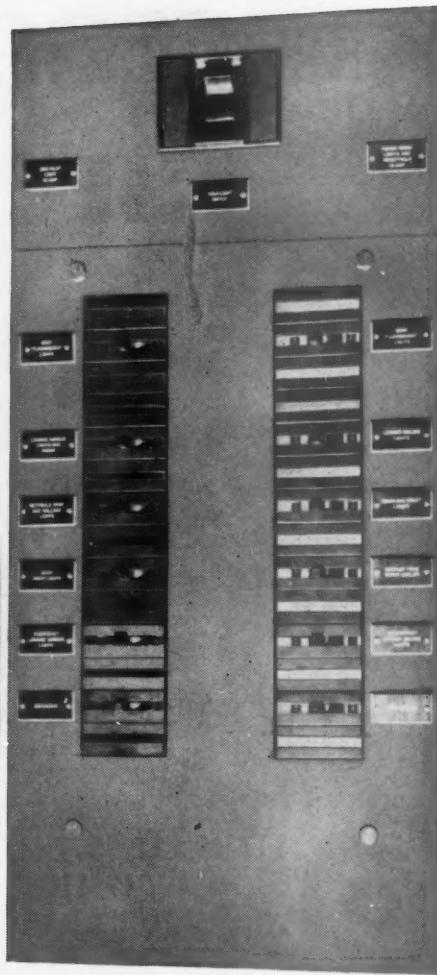
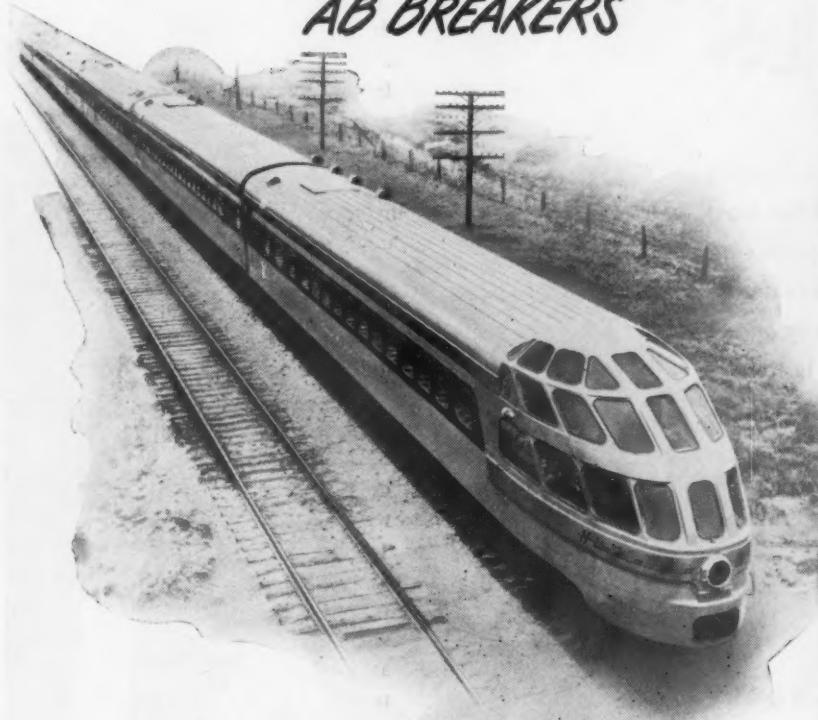
JOSEPH A. FISHER, whose election to succeed R. W. Brown as president of the Reading, effective September 1, was announced last week. Now executive vice-president of the Reading, Mr. Fisher was formerly its vice-president in charge of freight traffic.

### ... And Elsewhere

**NATIONALIZATION IN CUBA?** President Carlos Prio Socarras, of Cuba, is reported to have said he will ask for legislation to nationalize that country's railroad system. Such a step, if undertaken, would be directly contrary to the recommendations of a recent report to the International Bank for Reconstruction and Development (Railway Age, February 26, page 34), which advocated rehabilitation and merger, under private management, of the Consolidated of Cuba and the United of Havana. Those two companies, together, own about 83 per cent of the island's 3,000-mile public service railroad system.

**TRANSCONTINENTAL TRUCKING:** Pacific Intermountain Express, which has so far failed to win I.C.C. approval for creation of a transcontinental trucking system through acquisition of Keeshin Freight Lines, is reportedly accomplishing the same results through what appears to amount a "per diem" arrangement for hauling P.I.E. semi-trailers east of Chicago. The cooperating eastern company is Mid-States Freight Lines, which pays P.I.E. for use of its trailers; through freight charges are prorated between the two carriers. The new arrangement is said to cut about 69 hours off a normal cross-country trip and to permit seven-day delivery from coast to coast.

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AB BREAKERS*



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**AB CIRCUIT BREAKERS**  
**THE COMPLETE LINE**



# FREEDOM WHEELS

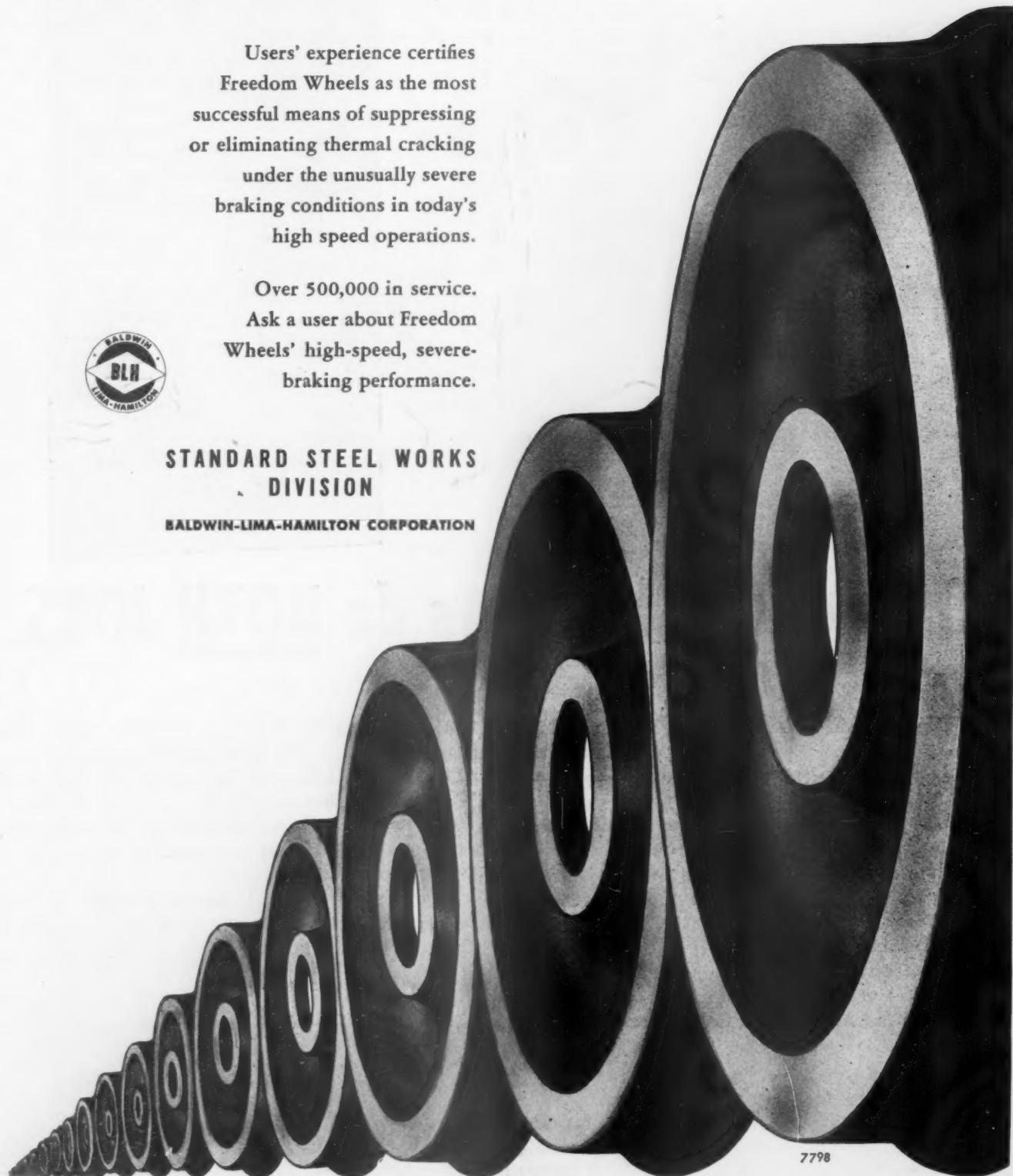
Users' experience certifies Freedom Wheels as the most successful means of suppressing or eliminating thermal cracking under the unusually severe braking conditions in today's high speed operations.

Over 500,000 in service.  
Ask a user about Freedom Wheels' high-speed, severe-braking performance.

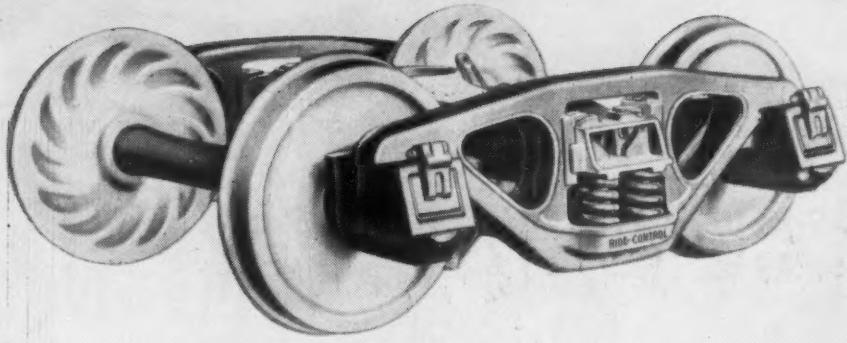


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BALDWIN-LIMA-HAMILTON CORPORATION



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THE A-S-F RIDE-CONTROL TRUCK  
... first—by far—with Users!

More Users buy more A-S-F  
Ride-Control Trucks than all other  
trucks combined...because Ride-Control®  
is smooth-riding, long-lasting--  
cuts operating costs!

American Steel Foundries  
MINT MARK OF  FINE PRODUCTS



# HOW 3 FREIGHT CARS CAN DO THE WORK OF 4!

One way to get more work out of a freight car is to move it faster. That's mighty essential today, for America's railroads are faced with the greatest transportation demand in history.

Many progressive roads are now moving freight cars faster by using General Motors Diesel locomotives. Although Diesels number less than 20% of the nation's freight locomotives, they are now hauling almost 50% of the total freight ton-miles.

Since completely dieselizing its freight operations, one Midwestern Class I railroad increased net ton-miles per freight car-day from 747 to 1,035—an increase of more than 35% in freight car efficiency.

It's as simple as that. With General Motors Diesels hauling heavier trains on faster schedules, three freight cars can do the work of four!

Demand for this modern motive power was never more urgent. Electro-Motive Division is doing its utmost to meet America's needs by building General Motors locomotives as fast as possible in the face of current restrictions and shortages.

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Car



Passenger  
Car



and Diesel  
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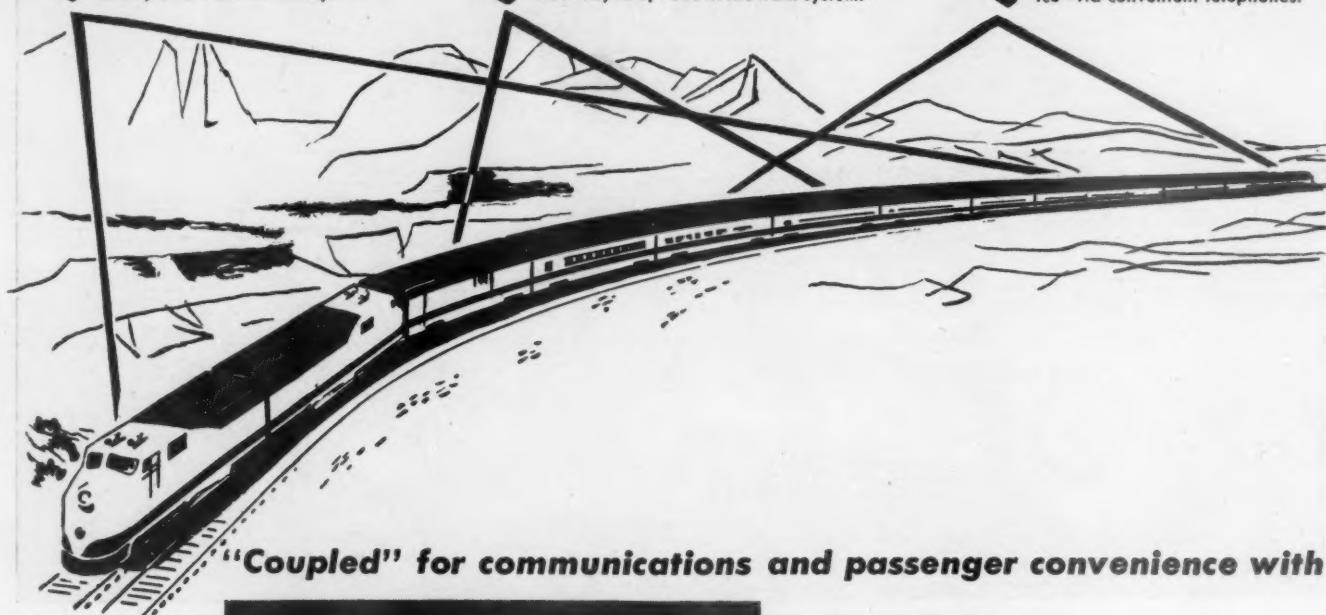
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**Conductor to Passengers**  
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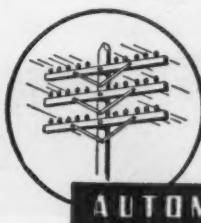
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in Lost Man Hours*

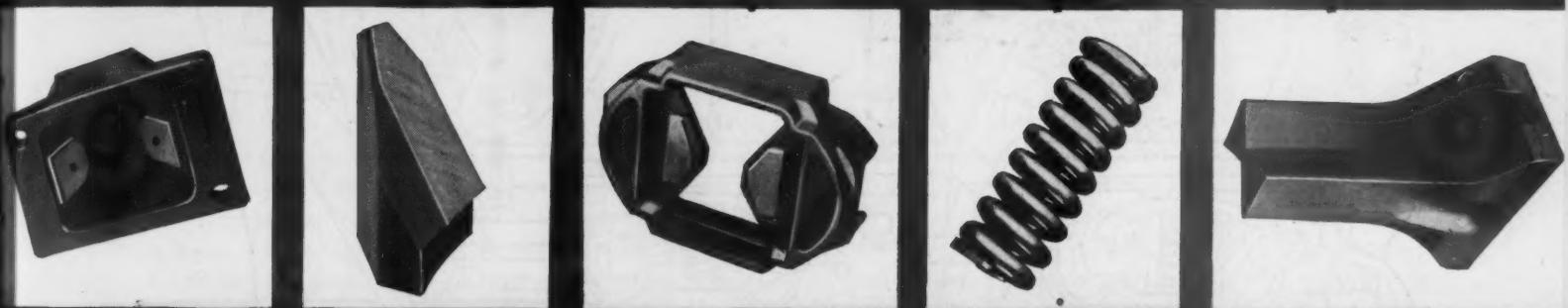
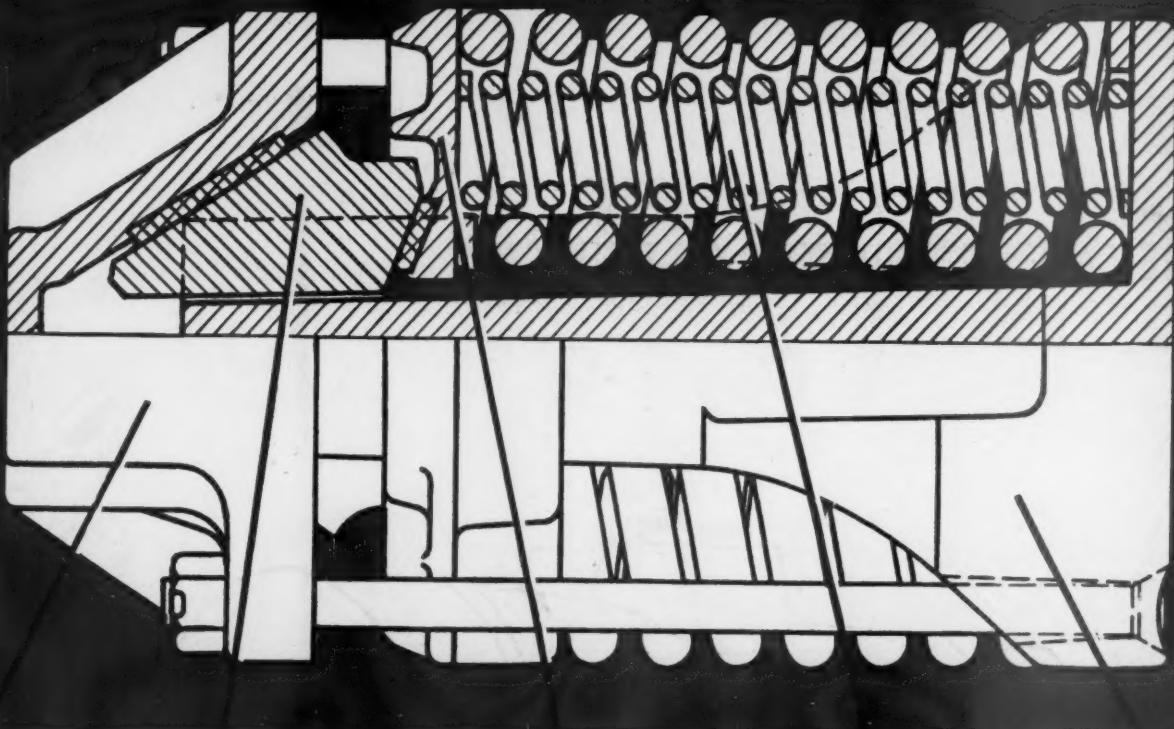
\*Estimate. Does not include average cost of compensation which even for the low cost year of 1938 was \$328.

In the entire plant operating picture, no high cost is more unnecessary yet easier to reduce than the tax exacted by industrial eye accidents. It can be cut 98%... thousands of dollars can be saved annually... trained workers can be kept producing steadily during this period of high production—

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## Why the National M-17-A is outstanding!

### ... Report No. 950 on AAR Five and Twelve Year Tests

• Our Report No. 950 (taken from Circular No. DV-1215, Annual Report of the AAR Committee on Couplers and Draft Gears) gives in detail some of the success of the National M-17-A Friction Draft Gear. A brief summary of the AAR Committee's conclusions shows how this gear gives outstanding performance in providing maximum car protection.

The report points out that in both the five and twelve year tests "externally these gears appeared in good shape... internally there was no detectable wear... the wedging surfaces were all nicely polished... friction surfaces all had

nearly 100% contact and all surfaces were fairly straight."

And the report shows that after twelve years of service, the average capacity of the gears tested was still 37% above the AAR minimum of 18,000 foot-pounds required of new gears.

The National M-17-A gear stood up well on these tests because of its rugged design of inwardly acting wedge pressure against a centrally located friction member. Alloy steel castings with machined, ground and hardened friction surfaces assure accurate fit and long wear life.

*Write today for your copy of Report Number 950 on AAR five and twelve year tests: National Malleable & Steel Castings Company, 6000 Quincy Avenue, Cleveland 6, Ohio.*

**NATIONAL MALLEABLE and STEEL CASTINGS COMPANY**

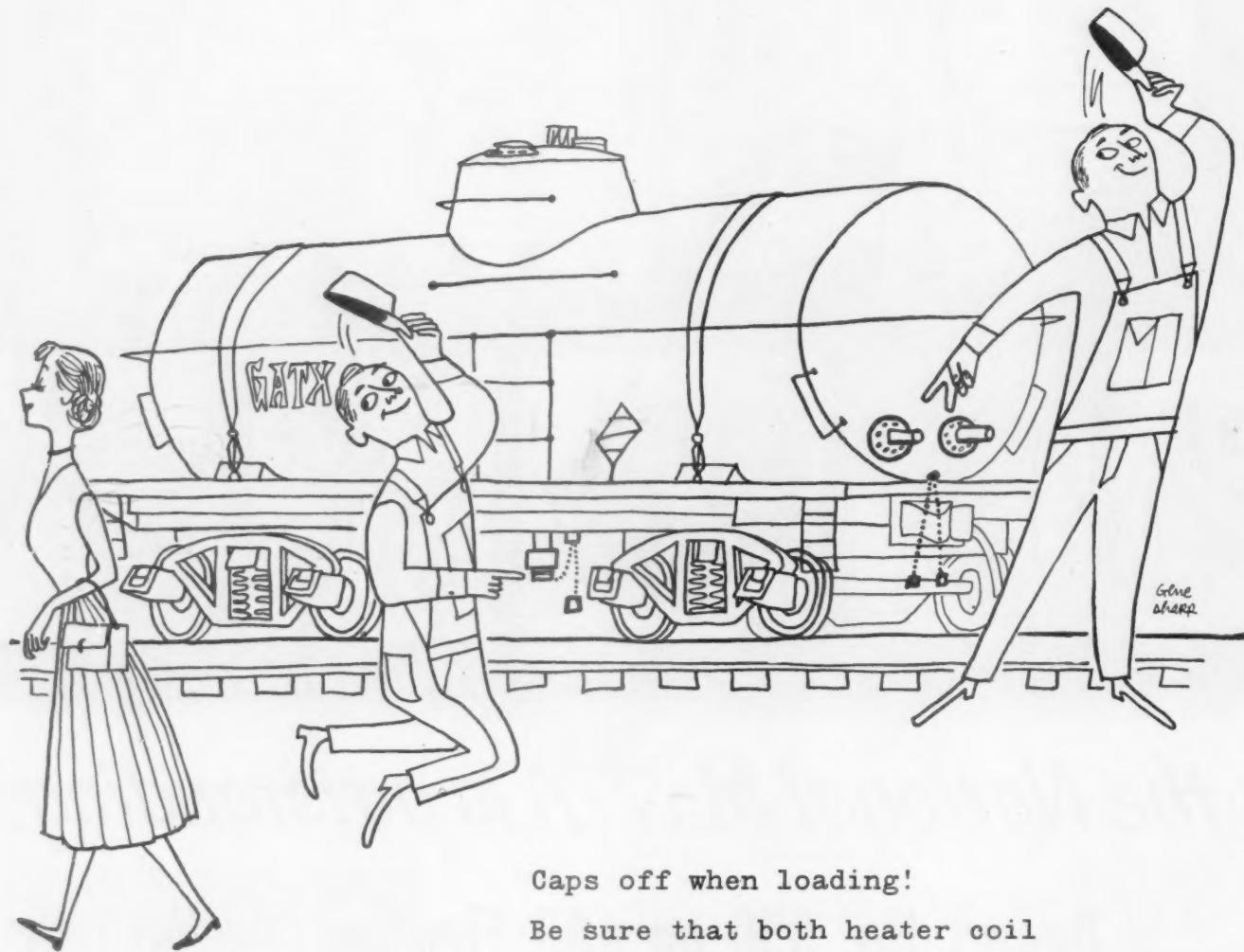
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## FLOOD "CONTROL" THAT ISN'T

The nation might as well brace itself now for an onslaught by the socializers and the quack doctors of flood "control" which manifestly does not prevent or mitigate disastrous inundations. These self-servers and misguided zealots may be confidently expected to try their best to misinterpret the disastrous floods in Kansas and Missouri in terms of their own special interests. It will be a pity if honest and competent conservationists are not equally vocal in getting public attention for some important but generally unmentioned facts about these floods which the enthusiasts for unlimited federal expenditures invariably seek to conceal.

It requires no background of education in either engineering or soil control to understand that (1) when a flood overtops and destroys a levee, the expenditure on the levee becomes a total loss; while (2) every dollar expended to hold water on the land where it falls inevitably produces favorable results in reduced overflow down stream. Despite the obviousness of this common-sense principle, the hundreds of millions of dollars of outlays for alleged flood control which the federal government continues to pour out have gone in large measure for the kind of works which big floods surmount and destroy, while little or nothing is spent on stopping or decelerating the run-off at its very inception. Aside from this manifestly illogical approach to the problem, there have been at least three other major flaws in the federal government's method of dealing with it, viz.:

### **Three Major Flaws**

I—The customary divorce—practically always characteristic of governmental invasion of the economy—between the people who get the supposed benefits of the program and those who have to pay for it. No program for large expenditure is ever carried out efficiently when thus deprived of the watchful eye of the paying customer.

II—Flood control is usually subordinated to such socialistic goals as federal production of electric power and provision of toll-free water-way transportation—objectives which are usually, and perhaps necessarily, antagonistic to genuine control of flood waters.

III—The job of water control has been largely if not entirely entrusted to engineers, when the rate of run-off is, primarily, a function lying in the field of knowledge of agronomists and soil conservationists.

Some of the "I-told-you-so's" now being uttered are to the effect that the recent flood would have done little or no damage if Congress had only appropriated the hundreds of millions of dollars the zealots for more and bigger expenditures asked for a few years ago, for the construction of numerous dams and reservoirs in the valley of the Missouri and its tributaries. Oh, indeed? If these reservoirs *had* been provided, would they not most likely have been bank-full from the spring catch when the July rains came—to provide the water needed to keep navigation channels and hydroelectric output constant during the customary July-August drought? Dams and reservoirs to prevent floods are one thing. Those to assure a steady flow of water for electric power and year-round barge transportation are something else again.

The able writer and soil conservationist, Louis Bromfield, tells in his book "Out of the Earth" how, by improved soil management, he now holds 95 per cent of all rainfall, even from cloudbursts, right on his farm in Ohio—compared to an 85 per cent loss in run-off before he instituted his new methods. He proceeds to tell of the Muskingum Watershed Conservancy District in his neighborhood—where, in 1947, there were rains almost as heavy as those of 1913, but with no property damage and no loss of life; and with reserve space in the district's reservoirs for flood waters twice as great as those of 1913. Moreover, the Muskingum project—while it got some tax money at the outset—can be made self-liquidating and perhaps even a profitable enterprise, with

no expense to the taxpayers. As Mr. Bromfield prophetically observed:

"Army engineers are planning and building dams for the Missouri Valley and other areas and expensive levees and barriers on the lower reaches of that big, turbulent and muddy river. As certainly as the sun rises tomorrow, these great dams will fill up with silt and become useless and the great levees will break and release augmented destruction."

#### **Policy of Obvious Failure**

The nation has poured out billions in following the advice for river control proffered by bargemen and hydroelectric zealots, and flood damage mounts all the time. Before we spend additional hundreds of millions in further pursuit of a policy which is so obviously a failure, it might be well to listen to the counsel of the soil conservationists. One authority in this field, William Vogt, in his "Road to Survival," asserts that "John Jacob Astor and his gentlemen adventurers squeezed the life-blood out of our landscape when their trappers destroyed the beaver whose dams had held back the little waters." He is caustic about "flood control through engineering methods" and asks why people who settle on known flood plains have any right to expect the rest of the people to "bail them out."

Nobody has a greater interest than the railroads in getting some sense into national flood control policy—because no other industry suffers more heavily than the railroads do when floods are made worse than nature intended because national policy for control of rivers has been dominated by interests which have subordinated genuine flood control to the socialization of transportation and electric power. Flood control is not merely, or evenly mainly, an engineering problem. It embraces also, at the very least, ecology, agronomy, economics and sociology—and competent counsel from those fields, if listened to, should retrieve the colossal failure which a purely engineering approach, under the domination of socialistic objectives, has so far inflicted upon the nation.

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## **WHY NOT "GOVERNMENT PROMOTION" IN MANUFACTURING?**

In view of the federal government's promotional practices in transportation, Congress might well be urged to follow through consistently and pass, say, a Nylon Production Act. The act would provide for construction by the government of modern plants to be leased free or at nominal rentals to nylon manufacturers who would be required to furnish only the necessary machinery.

Before this proposal is dismissed as a crackpot idea, consideration should be given the nature of the nylon industry. It is relatively "new," and, perhaps, could

qualify as an "infant." Few would deny that it is a "progressive" branch of the textile industry. Some might argue that it should be promoted by the government because other branches of the textile industry have become "hidebound"—have not kept up with the "march of progress."

Surely the "public demand" for nylon products would be greatly stimulated if governmental promotional policies permitted their sale at prices less than the full cost of production—reduced, that is, by having to reflect no cost for plant or *ad valorem* taxes on plant. Under such conditions large "savings to the public" could be claimed as "offsets" to the subsidies, and construction and operation of nylon plants would certainly "provide employment."

Nylon must be used in large quantities by the armed forces, so the "national defense" angle could be included as further justification. There might even be introduced a mail-service angle if it could be shown that development of the nylon industry gave promise of providing a new and better material for the making of mail sacks. The sale of products from the government-promoted nylon industry could also be greatly stimulated, at the expense of the older part of the textile industry, if the older part of the industry were subjected to rigorous government price-fixing from which the new nylon plants were largely or wholly exempt.

Subsidized transport agencies are kept "at the trough" and in vigorous growth by "reasoning" and political action exactly parallel to the foregoing. What, then, is delaying a Nylon Production Act? Perhaps this particular "new" industry is still "old fashioned" enough to want to stand on its own feet—which is something, alas, which cannot be said of the recent "new" and "progressive" accretions to the transportation industry.

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#### **"'NOTHER TRAIN GONE"**

"We shed a tear of nostalgia and regret at reading the item the other day that train service has ceased in Orwell and that the tracks are to be torn up.

"There is no doubt but that the branch which served Orwell has long since ceased to be a paying proposition. There was nothing else to do but close it down.

But one cannot help but have a feeling of regret for the gradual elimination of rail service to so many communities.

"It has now been roughly 18 years since Woodstock ceased to have railroad service. With modern highways, passenger cars and trucks, one would say that nothing has been lost but the fascination which is held for us 'old-timers' by railroads.

"Strangely, however, we note on our last newsprint invoice that it cost \$33.09 to get three tons of paper shipped from Gatineau, Que., to White River Junction by rail—and roughly \$10 to get the paper trucked to Woodstock from the Junction.

"Obviously, railroads do have some advantages for certain types of freight shipments.

"In spite of all the arguments, we still insist that a town which loses its railroad is in danger of drying up."—*An editorial in the Woodstock, Vt., Standard.*



## Tax Increase Would Upset Improvement Programs

The railroad industry's opposition to any increase in the corporate income tax rate was expressed last week by J. Carter Fort, vice-president and general counsel of the Association of American Railroads. Mr. Fort made his presentation to the Senate Finance Committee, which is considering a House-approved tax bill (H.R.4473) with provisions calling for an increase, from 47 per cent to 52 per cent, in the corporate tax rate.

Because the 47 per cent rate creates conditions under which "it takes \$1.90 of net income to produce \$1 for capital expenditures," Mr. Fort found it "difficult to comprehend" how the railroads could assume the proposed new burden "and at the same time meet the imperative requirements of the present emergency."

The A.A.R. vice-president explained that these requirements call for large capital expenditures to expand railroad facilities. "There are," he added, "only two sources of funds for capital expenditures, namely, investment capital and earnings. In the case of the railroads, the availability of investment capital under existing conditions is in large measure limited to borrowings for expenditures for unencumbered new equipment.... At the now existing burdensome level of corporate tax rates, the availability of earnings as a source of funds is severely, even critically, restricted. . . ."

Mr. Fort went on to say that "the menace of an insupportable burden of federal income taxes" on railroads is

"more serious" than in the case of general industry, because railroads "do not have the same freedom to discontinue or curtail operations, even though they be unprofitable"—nor can they adjust their charges to variations in their cost without prior authorization of regulatory agencies.

Mr. Fort also opposed that phase of the tax-increase proposal which would apply any raise retroactively to January 1. "A retroactive increase in taxes," he said, "can hardly fail to bring about serious curtailment in capital improvements already planned and even already actually in progress. Obviously such a result would not be in the interest of national defense."

The A.A.R. vice-president next addressed himself to the bill's proposal to

restrict a group of affiliated corporations to a single surtax exemption. If such a provision were enacted, he said, it should apply only to corporations created subsequent to a specified date, prior to which there could have been no motive for corporate split-offs for purposes of tax avoidance.

As for a "specified date," Mr. Fort suggested that consideration be given to October 8, 1940, when the excess profits tax was first imposed during World War II. Meanwhile, he had pointed out that "multiple corporate set-ups are the rule rather than the exception 'in the railroad field'; but they are 'long-standing arrangements, 'in no sense the result of artificial splitting-off with an eye to the tax laws." Mr. Fort also urged repeal of the two per cent penalty imposed upon corporations for filing consolidated tax returns.

## Board Sends Wage Cases Back To Truman

The national mediation board has referred back to the White House the unsettled wage and rules disputes involving railroad operating employees who are represented by the Brotherhood of Locomotive Engineers, Brotherhood of Locomotive Firemen & Enginemen, and Order of Railway Conductors. The board advised brotherhood and management representatives of this action in a July 24 letter which noted that the negotiations were "dead-

locked," and that the board's mediatory efforts had proved "unavailing."

Chief executives of the three brotherhoods replied on the same day with a letter which advised that they were willing to arbitrate the disputes—"provided a satisfactory agreement can be reached with the carriers, and provided further that the agreement to arbitrate is made contingent upon the parties agreeing upon the neutral arbitrator or arbitrators, or on a

mutually satisfactory arrangement for selecting him or them."

Members of carrier conference committees, who represent railroad management in the negotiations, had "no comment" on the arbitration proposal.

The disputes involved are among those which the management representatives considered settled by the "memorandum of agreement" which was signed by them and the brotherhood leaders at the White House on December 21, 1950. That basis of settlement was subsequently rejected by the general chairmen of the three brotherhoods here involved and of the Brotherhood of Railroad Trainmen. A separate settlement was subsequently reached with the B.R.T. (*Railway Age* of June 4, page 60.)

N.M.B.'s July 24 letter recalled that the mediation proceedings which the board was ending had got under way last January at the request of the White House. Then came the reference to the "deadlocked" situation, after which the board went on to advise that it was forwarding to President Truman a report "outlining the present status of these cases."

#### Army Secretary Advised

The letter added that the secretary of the army was also being advised of the situation. The army has been operating the railroads since August 27, 1950, when the President seized them in the face of a nationwide strike threat posed by the O.R.C. and B.R.T.

The remainder of N.M.B.'s letter, which was signed by Chairman Leverett Edwards, advised the parties that the board "does not presently plan to schedule any further conferences but in the event any of the parties should feel that the board can as-

sist them in any manner, it stands ready to consult with them."

The unions' joint reply was signed by President D. B. Robertson of the B. of L. F. & E., Grand Chief Engineer J. P. Shields of the B. of L. E., and President R. O. Hughes of the O. R. C. In leading up to the arbitration proposal (noted above), the letter said in part . . .

"The Railway Labor Act prescribes, in the event the board's efforts to bring about an amicable settlement through mediation are unsuccessful, that the board shall at once endeavor as its final required action to induce the parties to submit the controversy to arbitration. In lieu of the commanded prompt exercise of its statutory obligation and authority to proffer arbitration, the board has decided to report the status of the cases to the President . . . , without scheduling further conferences, and with the further delays and uncertainties that such procedure entails."

The arbitration proposal, the letter added, was made "with the purpose of promoting prompt and orderly settlement of the controversy." A joint statement issued by the union when they made the letter public said that Messrs. Robertson, Shields and Hughes were "surprised" that the board "decided to refer this case to the President before exhausting its own efforts under the Railway Labor Act . . ."

A spokesman for the B. of L. F. & E. said on July 25 that action to take a strike vote among that unions' members was "still hanging fire." On July 11, the union announced plans for the taking of such a vote after July 15, unless by then an "acceptable basis" for settlement of its dispute had been agreed to by railroad management. (*Railway Age* of July 16, page 33, and July 23, page 52.)

areas, Mr. Gass said. Heavy rains and flood conditions have already caused delays, and the railroads "most likely" will have to move simultaneously much of the winter wheat production in Nebraska, Kansas and Colorado.

Anticipating heavy box car demands to handle this grain movement, Mr. Gass noted that Special Car Orders 80 and 81, both effective July 16, have been issued by the Car Service Division. These orders provide that box cars belonging to a number of Western roads "may only be loaded to, via or to a junction with owners." Meanwhile, these Western roads must preferentially load foreign box cars on off-line loading.

The supply of plain flat cars has improved to some extent recently, but roads in the middle west continue to experience shortages for the loading of farm machinery, Mr. Gass reported. He said there are also "very heavy demands" for well and depressed center flats, and added that the same holds true with respect to covered hoppers. Refrigerator car supplies, on the other hand, "have been sufficient for all current requirements," Mr. Gass said.

As to prospects for open top cars, Mr. Gass said there are "no current indications" of an increase in revenue coal loadings. These have been averaging about 150,000 cars per week. He did note that export coal shipments overseas are averaging close to 2½ million tons a month, and he said 1951 coal production may total "in the neighborhood of 525 million tons."

Average turn-around time of freight cars in June, as reported by Mr. Gass, was 14.79 days. The comparable figure for June 1950 was 14.6 days. On the basis of reports from 677 cities in the various shipper board districts, cars detained beyond the free time of 48 hours averaged 13.85 per cent of those placed in June. This compared with 13.67 per cent for May and 21.8 per cent for June 1950. For the first six months of this year the average detention was 14.75 per cent, compared with 21.1 per cent for the corresponding period last year.

## Gass Reports Gain in Car Ownership

Freight car ownership on Class I railroads and their subsidiary car lines increased 5,626 cars in June, the highest monthly increase since April 1942, Arthur H. Gass, chairman of the Car Service Division of the Association of American Railroads, reported in his latest issue of the "National Transportation Situation."

Class I roads installed 9,041 new cars in June, while retirements were reduced to 3,415, Mr. Gass said. He added that June retirements were the lowest for any single month since February 1947. Since July 1 of last year, the railroads have increased serviceable car ownership by 40,000 cars, Mr. Gass continued.

Commenting on this improved equipment picture, Mr. Gass said there was an increase of 13,662 in serviceable car ownership in the second quarter of 1951, compared with an increase of 4,387 for the first quarter this year.

The C.S.D. chairman noted that total new car production in June amounted

to 9,644 cars, with 147,725 remaining on order at the end of the month. This backlog represents more than 15 months production at the June rate.

Other figures included in the report by Mr. Gass showed that in the 12 months since the outbreak of the Korean war, more than 184,000 new freight cars have been ordered, while deliveries have totaled 77,284. Class I roads and their car-line affiliates accounted for 167,000 of the cars ordered, and 73,146 of the cars delivered went to these roads.

Turning to his usual discussion of car supply, Mr. Gass found the supply of box cars "adequate to meet current demands." As to hopper cars, the supply "is tightening up" now that coal miners have completed their annual vacation; and gondolas continue in short supply everywhere as steel loadings remain high.

A wheat crop estimated at 1,070 million bushels may lead to temporary "spot shortages" of box cars in some

## ST. LAWRENCE SEAWAY RESOLUTION PIGEONHOLED

The House Committee on Public Works last week voted to pigeonhole proposed legislation to approve the United States-Canada agreement for construction of the St. Lawrence seaway and power project. The committee's action, taken July 26, by a 15-to-12 vote, would seem to have killed chances for approval of the project at the present session of Congress.

The adverse vote defeated a proposal to report to the House a St. Lawrence resolution (H.J. Res. 4) sponsored by Representative Blatnik, Democrat of Minnesota. At previous sessions, the committee had disposed of other similar resolutions.

## Operation "Mop and Shovel" Begins

The crest of the Missouri-Mississippi flood has moved down beyond St. Louis causing more damage and flooding railroad facilities along the Mississippi toward the junction with the Ohio. Fortunately for those river towns south of that point, and for the railroads of Memphis, the Ohio is relatively low and will act somewhat as a safety valve by taking the peak off of the Mississippi's crest as it reaches the junction.

Meanwhile, railroads in the Kansas City area are forging ahead in their effort to clean up yards, freight houses, and repair damaged and water-soaked rolling stock. Work is going forward too, on washouts which occurred at crossings of tributary rivers as far west as central Kansas. In some cases these washouts were so complete that service will not be restored for another ten days to two weeks.

In St. Louis, most of the roads were better prepared for the flood and consequently the damage bill is not expected to approach anywhere near that suffered in the Kansas City area. Because St. Louis is generally higher above the water level, service interruptions were not as widespread and many of the roads—particularly those operating to the east—were able to carry on virtually unhampered.

Few of the roads have been able to offer any kind of an estimate as to the total loss they have sustained. The monumental task of removing silt (which in some cases has completely covered yard tracks and invaded freight houses to a depth of as much as ten inches) and restoring road and equipment service has been too great to permit such estimates at this time. They will come later. And some of the roads indicate that they will be pretty high. The Army is helping truck out the silt from some of the yards in Kansas City.

### The Railroads Report

*Individual roads reported by telephone to Railway Age on July 25 as follows:*

**Wabash.**—Freight service between St. Louis and Kansas City has been restored but a detour via the Santa Fe at one point is still required. No passenger trains yet operating between Kansas City and St. Louis but streamliner "City of St. Louis" operating to west coast via Omaha and Union Pacific. Damage bill has not been estimated but it will be "quite extensive." Little trouble experienced in the St. Louis area. Local passenger service to and from Omaha is still out.

**Missouri Pacific.**—The big job is the cleanup of the yards and freight house at Kansas City. The work is about 50 per cent completed. Workers found water had reached the second floor of the freight house and one part of a loading platform was broken off either by a "floating" box car or by the force of the water itself. All pas-

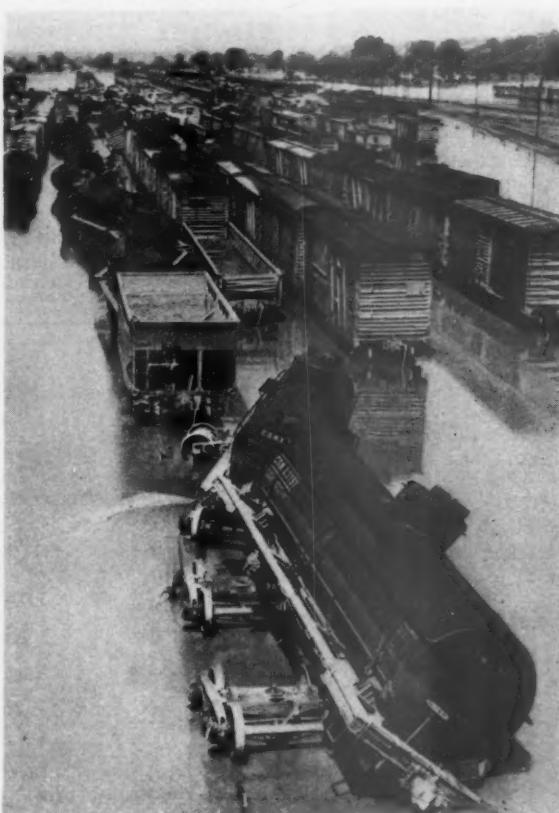
senger services have been restored. The low-level "river freight line" between St. Louis and Kansas City was restored to service on July 24. Previously, trains had been detouring on the passenger line via Sedalia, Mo. Little damage of consequence in the St. Louis area but the ferry operation of the affiliated Missouri-Illinois at Kellogg, Ill., was suspended for three days because of flooded tracks. Steam locomotives were used in this area to

begin operations before the waters had completely cleared.

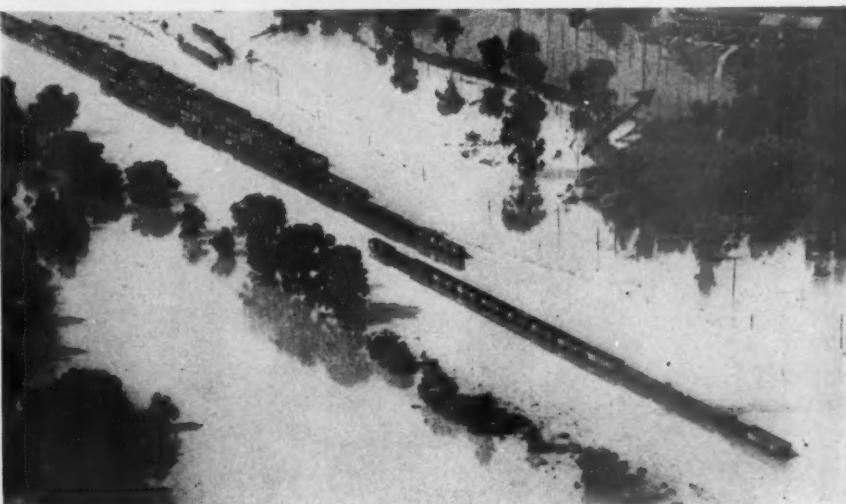
**Missouri-Kansas-Texas.**—Particularly hard hit, the Katy has estimated that it has suffered a loss of over \$2 million. Visible damage has thus far been set at \$500,000 and the loss of revenues at \$1.5 million. Detouring and other expenses are additional to this figure. Some 2,300 feet of line have been completely destroyed between St. Charles, Mo., and Machens. For 13 miles in this area the Katy's

**MID-WESTERN FLOOD WATERS LEFT A MESS IN KANSAS CITY (right) . . . AS THEY MOVED IN ON ST. LOUIS (below)—**As flood waters receded from the Kansas City area, cleanup gangs faced monumental tasks of removing silt which had piled up over yard rails and switches, of mounting tank cars back on their trucks, of cleaning and reconditioning box cars, of cleaning and repacking journal boxes, of cleaning and testing air brakes of these and hundreds of other freight cars before freight could begin to move again. Note the high water mark on the box cars in the Rock Island's Armourdale yard (right); it is higher than the roof tops of some of the smaller box cars in the background.

The gondola cars caught by the swollen Mississippi in North St. Louis resemble river barges in the air view below, which shows the waters lapping around the plant of the St. Louis Car Company (visible beyond arrow in extreme upper right). Because St. Louis is generally higher above normal water level than Kansas City, and because there was more time to prepare for the onslaught, railroad damage in the St. Louis area is not expected to be as heavy as that now being tabulated in Kansas.



Acme  
Telephotos



roadbed acts as a levee and the damage sustained here is such that service may not be restored for another two weeks. In many places in Kansas, tributary rivers have washed out bridge approaches and crested six and nine feet above the level of the bridge decks. Some tracks in Kansas City had 16 ft. of water over them and the freight house has high water marks 18 feet above the ground. Silt is a problem.

**Gulf, Mobile & Ohio.**—Not as badly hit as some of the other roads, the G.M.&O. suffered little damage in St. Louis. Service to Kansas City expected to be normal by July 28 but a detour around Harmony, Kan., will be in effect for 10 to 15 days more. Little damage to freight at Kansas City as carload and l.c.l. largely removed and stored at Independence before waters reached yards and freight house.

**Kansas City Southern.**—Principal flooding in Kansas City was in Henning St. yard and freight house. All freight removed in time and operations have since been restored in

both places. Water is still over the tracks in the Armourdale district and silt is 10 to 12 inches deep at points. Army engineers are helping in the task of silt removal and service will probably be restored in two or three days. Main Kansas City yard was not affected. Passenger service interrupted for 36 hours at bridge over Marais Des Cygnes river some 75 miles south of Kansas City.

**Rock Island.**—The "Twin Star Rocket" resumes service on July 26 and with it all passenger service returns to normal. Maintenance men are being moved into the Kansas City area from all possible points on the system to speed restoration of freight service. The Armourdale yard is still "pretty bad."

**Illinois Central.**—No important damage and no service interruptions have been reported either from the St. Louis area or along the Mississippi to the south.

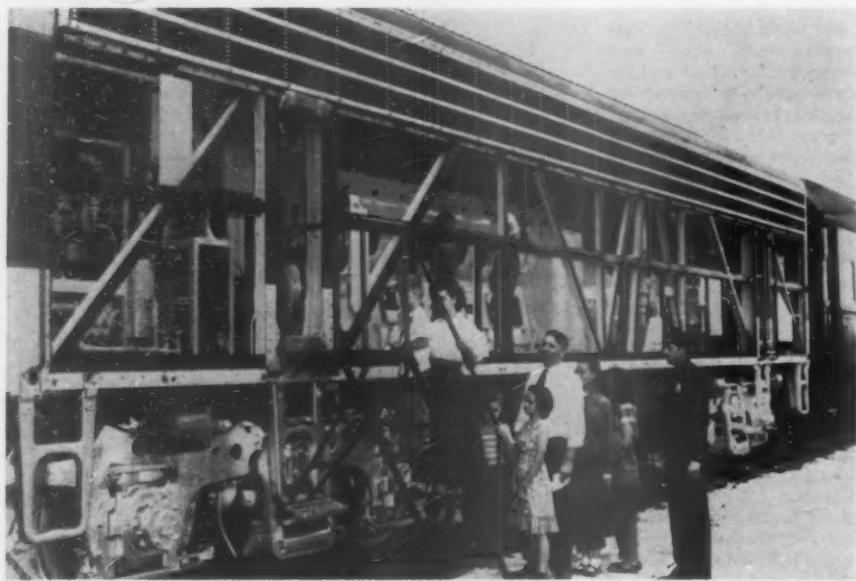
**Santa Fe.**—Passenger operations have been restored to normal except

that trains via Topeka are being operated by way of Ottawa Junction with stub train service from Emporia to Topeka from the west. All freight is being handled on own rails. Cleanup operations are in full swing at Argentine (Kansas City) yard.

**St. Louis-San Francisco.**—Operations have pretty well recovered but regular St. Louis-Memphis trains have not yet been restored to service. At Cape Girardeau, Mo., five feet of water in the depot and yards have forced the use of stub train and bus service on a once-a-day basis to connect these two cities. Dead livestock from the Kansas City livestock yards found half-buried in the silt in yards. One hog was floated right into the freight house.

"All in all, we have not been too severely hit."

Surveys of the flood area by the Defense Transport Administration indicated that in the field of transportation the railroads suffered the heaviest damage. A D.T.A. announcement issued July 25 said the chief emergency



IN FURTHER OBSERVANCE of its centennial year, the Erie is displaying in more than 100 on-line communities a special 18-car exhibition train, which includes the cutaway diesel-electric locomotive unit shown at the left; a 10-foot model of an old-time locomotive (left, below); and the United States Army's 73-ton "Experimental Heavy" tank, mounting a 155-mm. gun (below). Also in the train are a modern coach, dining car and sleeping car; a demonstration box car, refrigerator car, "high and wide" flat car and radio-equipped caboose; and a special museum car containing models, schedules, train orders, historical documents and other memorabilia relating to Erie history



in the area is for steel to repair and replace railroad bridges, damaged rolling stock and other facilities.

"As of (July 23) railroads were picking up some 12,000 dead animals, re-railing more than 2,000 freight cars, clearing tracks of mud and debris, and replacing rails and ballast," the D.T.A. reported.

"Serious damage to freight yards near Kansas City will require another week or more of rehabilitation work. One road had 4,500 cars and 51 diesel units in the water in its yard. Of the cars, 700 were derailed, some floating off the trucks; these are being put back at the rate of about 60 a day. Another road had about 2,000 cars in the water (in some places 20 feet deep) in its yards; 17 engines were under water but were not seriously damaged."

The D.T.A. statement went on to say that the National Production Authority has arranged for steel to replace some main line bridge spans, but total steel requirements in the area are still in doubt. Little rail has actually been lost, but much is too badly bent to be put back and will have to be replaced.

Damage to commodities in transit presents another difficult problem, the D.T.A. said. About 2,500 cars of grain were caught in the flooded yards, and the transport agency has consulted with the Commodity Credit Corporation in regard to its disposal.

The announcement said also that "tremendously heavy damage" to highways and highway bridges occurred in the flood area. Some 40 truck terminals with shop and office facilities suffered about \$1,500,000 damage; and in one terminal 90 vehicles were destroyed.

In the field of warehousing and storage, two refrigerated warehouses were flooded, while six general merchandise warehouses were damaged up to the second floor. The exact condition of grain elevators has not been determined, although swelling of wet grain may have caused some structural damage, D.T.A. said.

For the duration of the emergency D.T.A. has opened an office at the U.S. Court House in Kansas City, Mo. This office is to provide assistance in obtaining materials and equipment for damaged transport industries.

## Car Repair Charges Held Not Under Price Freeze

The Office of Price Stabilization has exempted from ceiling price regulations the charges on repairs to freight and passenger cars, used in interchange service, made under application of the Code of Rules of the Association of American Railroads.

The charges set forth in the code are based on the average current labor rates and material costs to all the subscribers, without profit, and exempting the charges from price regulation will not impair the stabilization program, an O.P.S. announcement said.

## Warnings Stress Open-Top And Tank Car Situations

The serviceable fleet of open-top cars should be increased by 150,000 cars if next year's traffic is to be handled without a "critical shortage" of this class of equipment, Defense Solid Fuels Administrator Charles W. Connor said in a recent statement. Another recent statement from the National Produc-

tion Authority reported that parties interested in the tank car situation had informed N.P.A. that a "critical shortage" of pressure tank cars for transporting chemicals "exists today because of steel scarcities."

The solid fuels administrator's statement said that the open-top-car situation "underlined the importance of the summer fuel buying program" called for by government officials, including Director James K. Knudson of the Defense Transport Administration. Aside from the coal industry's heavy demands for open-top cars, Mr. Connor noted that "sharply increased tonnages of strategic materials" are also expected to move in that type of equipment.

The N.P.A. statement reported on a Chemical Tank Car Conference attended by government officials, car builders, and traffic managers of chemical producing companies. The car-builder representatives told them that "difficulty in obtaining sufficient quantities of large plate steel is responsible for drastic reductions in the output of tank cars."

(Continued on page 43)



RETRACTABLE RAIL WHEELS on ambulance buses used in Korea permit evacuation of wounded from frontline areas to hospitals or hospital ships with a minimum of litter handling. The two-way vehicle was developed by the 765th Railway Shop Battalion, and the Army reports it saves time and transfers and adds to the comfort of the wounded



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DESTINATION		Fare	
GOVT.		Tax	
		Total	
1/2 <input type="checkbox"/>			
GOOD FOR ONE PASSAGE		CLASS	
of the class indicated - Via Railroad Between Points Outlined by Heavy Rule		F	T <input type="checkbox"/> O <input type="checkbox"/>
FROM		VIA RAILROAD	
TO		FIRST COACH	
TO			
BAGGAGE <input type="checkbox"/>			

## Now Tickets Are Streamlined Too!

**Enthusiasm runs high wherever handy new book-type ticket has been tested — Will it become the standard form for all interline traffic?**

In the heyday of vaudeville the "mile-long" railroad ticket was always good for a laugh—and few comedians passed it by. Today, echoes of those bygone theatricals are heard by many a passenger conductor when lifting a coupon from some passenger bound on a very lengthy or complex journey. However, there is a chance the "mile-longers" may someday follow vaudeville into the veil of history. The reason? Because the handy dollar-bill-sized book ticket appears to have passed all preliminary tests on two western lines with flying colors. And it has met with almost equally high approval from agents, passengers, conductors and auditors.

Currently, the question of adopting the new ticket as standard for all interline travel is under consideration by special subcommittees of each of the territorial passenger associations. At their most recent joint meeting, held in Chicago on July 17, these committeemen agreed

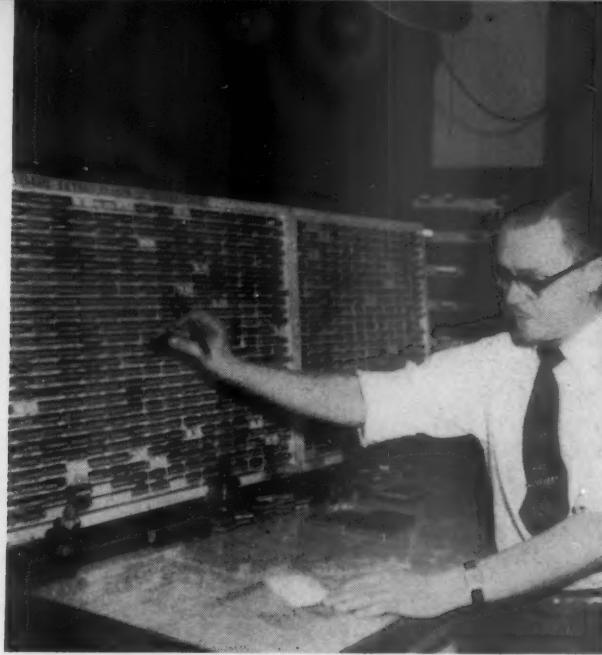
that the time is not ripe for any one version of the book ticket to be adopted as "standard" for all lines. Many refinements and new uses for the form continue to be suggested by agents, passengers, accounting people and others, and it was agreed that these must be further explored.

Without waiting for the reaction of other roads, the Union Pacific has already launched a program to discontinue the 550 various interline forms it has been using. Six forms of the book ticket (all alike except in the number of coupons they contain) are taking over as stocks of the older strip tickets become exhausted. A U. P. officer told *Railway Age* that remodeling plans for one of the road's larger city ticket offices will make no provision for the storage or sale of the conventional strip tickets.

Initially devised by a joint traffic-accounting committee



GROPING for the right form . . .



WRESTLING with rubber stamps and pasters . . .

of officers from the Milwaukee, the Santa Fe, the Rock Island, the Missouri-Kansas-Texas, the Illinois Central and the U.P., the book ticket is actually an adaptation of the basic principles of current airline tickets to the vastly more complex requirements of railroad interline traffic. This adaptation was no easy task, considering that three classes of fares (coach, tourist and first)—often mixed in a single sale—had to be accommodated along with a much greater number of separate carriers per journey than air travel normally requires.

#### **First Trial by Milwaukee**

After the form of the new ticket had been "roughed in" by the committee, the Milwaukee volunteered to be "guinea pig" for the first test in actual passenger sales. Passenger Traffic Manager Harry Sengstacken reported the successful results of this 2,000-ticket test to the American Association of Passenger Traffic Officers last fall (*Railway Age*, November 11, 1950, page 79). Since then, the Milwaukee has modified the original form somewhat and placed the new version in the hands of all 450 of its interline agents for a second test which will probably last several months. (The latest Milwaukee ticket differs somewhat from the first and that which the U.P. has adopted in that the coupons are vertical, rather than horizontal, thus permitting a ticket seller to make it up on a typewriter as well as with the otherwise necessary ball point pen.)

The Milwaukee is watching this second test very closely. If it is a complete success, close to 850 interline forms can be discontinued. Early and wholehearted approval has already come from Milwaukee ticket agents.

Out of 99 agents recently surveyed, 95 heartily approved the tickets. "It's the greatest thing since the self-starter," commented one agent. "I would feel awfully sick if we had to discontinue them and go back to the old forms," said another. The four who did not approve the new ticket all did so for the same reason. Faced with heavy military traffic to a limited number of destinations, they preferred the older, strip-type ticket because popular routes and destinations were already printed on certain of the older forms, simplifying and speeding ticket sales. Advocates of the new form point out that there is no reason why routes and destinations cannot be pre-printed in book tickets as well. The Milwaukee hasn't



AND TEDIOUS SORTING of cancelled coupons . . . Expensive headaches that can be banished along with the strip ticket, according to findings of the Milwaukee and the U.P.

done so during the tests because it would add considerably to the cost of the test while proving nothing that isn't already known. None of these agents had any other objection to the book ticket and one of them later decided that the new ticket's advantages so outweighed this one drawback that he requested his name be stricken from the list of objectors.

#### **How They Work**

Both western versions of the book ticket are basically similar. Each consists of one or more open form coupons (i.e., with blanks for route, destination, etc.) printed on a special carbon-backed paper and a similarly-backed

agent's stub bound between fairly stiff paper covers. By executing the top coupon in the book, the ticket seller (with the aid of the carbon backs) completes all coupons in the book in one motion, including his own stub and a "passenger's coupon"—a sort of "built-in receipt"—which is printed on the inside of the back cover. Full information on fare, class, tax, route, destination, date of expiration, etc., as well as the seller's validating stamp, appear on every page. Heavy ruled lines, which move down a "notch" on each progressive coupon, indicate that portion of the journey for which each coupon is valid. Otherwise all inside pages of the book are similar. The agent's stub is printed on paper of a contrasting color for quick and positive identification. Transfer coupons—varied somewhat to the requirements of the individual roads—are also bound into the book just inside the front cover. If not needed, they may be torn out or otherwise cancelled. If they are needed, however, they must be made out separately, as they do not conform with the carbonized coupons for the rail travel portion of the ticket.

Milwaukee and Union Pacific passenger and accounting officers have found that a ball point pen is the best instrument for making clear carbon impressions. Non-fading ink for these pens is now available. (In the past some roads prohibited the use of ball point pens in making out tickets because the inks were not entirely permanent.)

The maximum number of rail coupons per book is six. If a passenger's trip requires more than six coupons, one or more additional books containing one to six coupons each are simply stapled to the first as conditions warrant. However, each book must be made out separately.

The Seaboard's ticket is somewhat different. It uses a patented system of tissue carbon inserts rather than carbon-backed ticket paper and it comes in single or double length coupons accommodating as many as 10 coupons per book. The carbon inserts are torn off at the time of the sale and the coupons are then bound into a cover by means of a fastener. It has the advantage of "smudge-proofing" the ticket because the carbon is removed before the ticket is tendered the passenger. The Western Pacific has also been working on a version of the book ticket which is currently in the hands of the printers. Details of this ticket have not yet been announced.

All versions of the ticket use regular sensitized "Association" ticket paper identical to that used in conventional tickets.

### The Advantages

Aside from the obvious advantage of eliminating hundreds of interline forms, there are many other virtues in the coupon books, the Milwaukee and the U. P. have found. A ticket seller no longer has to grope through large ticket cases hunting (through many dog-eared forms that are seldom used) for the right form. He does not have to depend on a large collection of rubber stamps to make out the ticket, nor does he have to fold it carefully to punch a route, class or other information in the same place on each coupon. All he needs is a few square inches of writing space, a ball point pen or typewriter and the validator. Large ticket racks, rubber stamp sets and punches—which represent a considerable investment for any railroad—can be dispensed with entirely. So can the old "passenger's receipt for transportation purchased"—something of a nuisance to have to make out when there is a long line at the ticket window.

Both western roads say that passengers like the convenient size of the new ticket. Those traveling on expense accounts particularly appreciated the complete "passenger's receipt" printed on the inside cover. The receipt has also proved useful in the case of refund.

Conductors of both roads found that the tickets could be collected in less time because everything they needed to know (except sleeping or parlor car space held) was shown in each coupon.

Passenger auditors on both roads have found that book tickets make life easier for them, too. The sorting of coupons turned in by conductors has always been something of a headache, because most of the old-type coupons contained only fragmentary information about the sale they represent. With book-ticket coupons, intermediate carriers are always fully informed regarding the conditions of each sale.

### A Few Objections

One of the principal complaints about the new western-line tickets—which comes largely from passengers and conductors—is that the carbon backing on each coupon smudges the hands. A few women passengers, apparently curious about the new form, have reported stained gloves. Both roads claim that if the books become common enough, the novelty will wear off, and few passengers will bother to examine them any more than they do the conventional strip tickets. Tests have shown that relatively little of the carbon comes off onto the hands in normal handling of the book. Nevertheless, the subcommittee of the western lines has requested that the carbonizing firms, the printers and the paper manufacturers conduct an investigation to see if the carbon can be smudge-proofed. Experiments with carbon tetrachloride may hold the key to the problem.

Another complaint comes from agents and sellers in larger terminals, where the volume of interline ticket sales warrants extensive use of so-called "closed form" and multiple route and destination tickets which can be sold almost as quickly as they can be run through a validator. These agents argue that the sales transaction time per ticket would actually be lengthened by the use of the open form ticket books which require a seller to write all information in each book sold. This fact is not denied by either road. The Milwaukee has inferred that it may resort to preparing a limited number of books preprinted for key points. But their number will be nothing like the 850-odd forms that the Milwaukee hopes to discontinue.

## Communication . . .

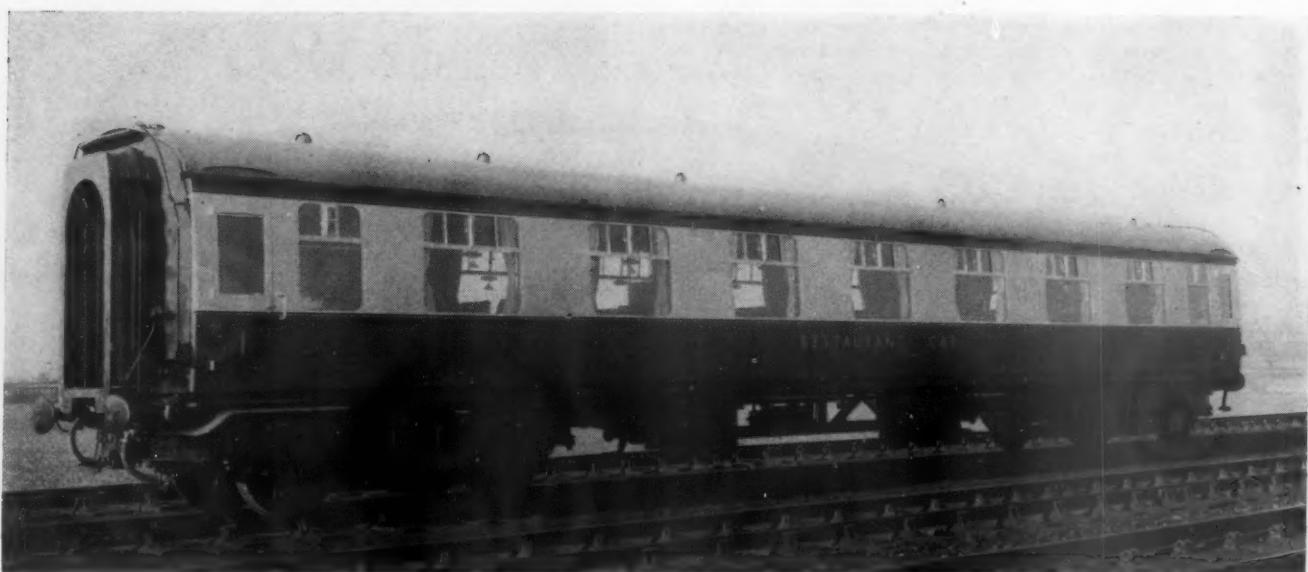
### L.C.L. Weak Spot?

NEW YORK, N. Y.

TO THE EDITOR:

I have read with interest an article by Harold T. Reed in the July 2 *Railway Age* ["Suggestions for Better L.C.L. Service," page 44]. Based on my experience, Mr. Reed has put his finger on the weak spot in the railroad handling of L.C.L. freight. If our railroad friends can be awakened to do something to get back their better grade L.C.L. freight, they will find their L.C.L. profitable rather than unprofitable as at the present time.

H. M. FRAZER,  
General Traffic Manager  
F. W. Woolworth Company



A first-class restaurant car typical in dimensions and general exterior appearance of the all-steel standard designs now being built by the British Railways

## Standard Passenger Cars in Britain

**New designs feature automatic couplers, vestibules, diaphragm connections, and all-steel construction  
—First phase of program calls for 1,189 new cars**

With the unification of the four main-line British railway systems in 1948 a major consideration presenting itself was the provision of standard designs for new rolling stock for passenger traffic.

At present, twelve standard types of corridor cars of a completely new design are under construction to meet the requirements of passenger services, the principal features of which are (1) widest possible route availability to enable them to operate over all four regions of the railway system as a whole; (2) all-steel construction and a design of underframing providing adequate strength; (3) automatic couplers; and (4) double-bolster four-wheel trucks.

The body structure, underframe and trucks are of a design common to all the vehicles now being built. The principal dimensions are as follows:

Length over body, ft.-in.	64-6
Maximum width over body, ft.-in.	9-0
Truck center, ft.-in.	46-6
Truck wheel base, ft.-in.	8-6
Height over roof panels, ft.-in.	12-4½

The underframes have been designed to take buffing loads of 448,000 lb., both on the central coupler and on the side buffers, which have been made retractable. This compares with end loads of about 270,000 lb. for which former London & North Eastern cars were designed.

The main components consist of two center girders from which cantilevers project to support the side sills

which, in turn, carry the body structure. Standard rolled sections are used throughout, these being fabricated by welding. There are no trusses under the side sills.

The car body is a steel structure, the components of which are assembled on welding jigs. When the sides, ends, and roofs are completed they are assembled to form the car body structure. The side plates are in two parts, one attached to the roof and the other to the side sill. These are joined by riveting. The car body is placed on and attached by welded connections to the underframe. These connections are outriggers which are welded to the lower ends of the side posts at their outer ends and to the side sills of the underframe at their inner ends. Their function is to transfer the car-body weight to the underframe.

The body frame members are of pressed steel, mostly of flanged U section. The side panels and roof sheets are of light-gage galvanized steel. The sides are curved continuously from bottom to side plate, but the edges of the panels around the windows are pressed flat in order that flat window panes may be used.

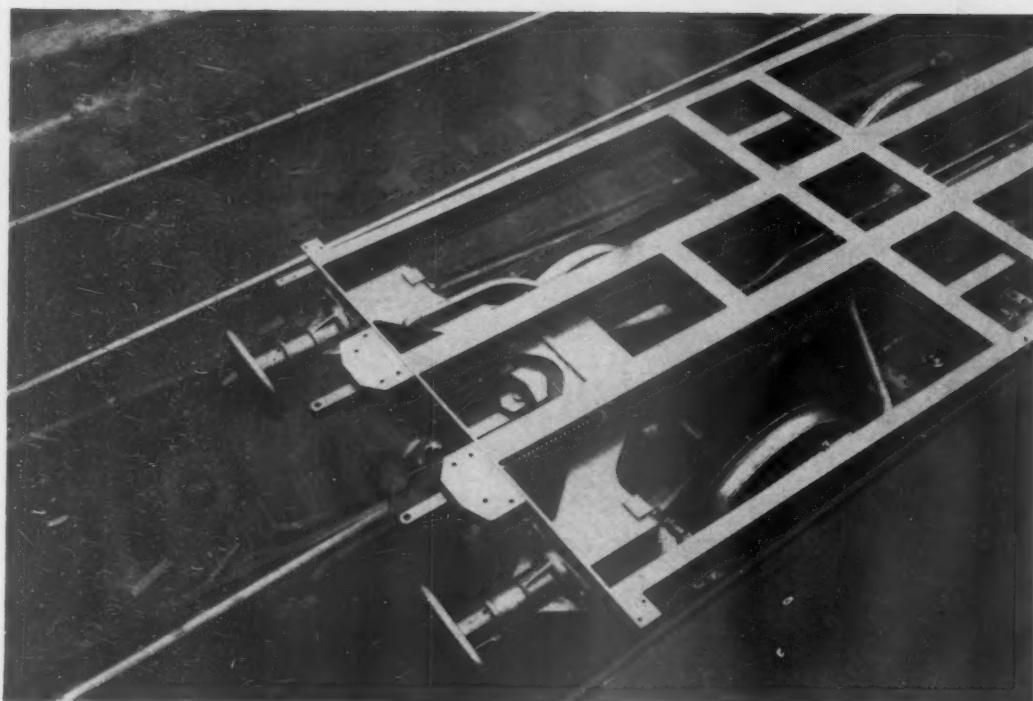
The floors are ¾-in. plywood, secured to transverse pressed-steel floor stringers and outriggers. Plywood is extensively used on side walls and in interior partitions. Partitions and sides are finished in veneer; the ceilings, with a plastic surface material.

The four-wheel double-bolster trucks have frames of

All photographs courtesy  
of British Railways



The underframe has  
trussed center sills  
and is designed to  
carry the body and  
live load



The automatic  
couplers have drop  
heads with hooks  
and retractable  
buffers for use in  
interchange with  
existing rolling stock



Interior of the steel  
body sheathing and  
underframe



The first-class restaurant car has seats for 42

standard rolled-steel sections and are of riveted construction. The wheel base is 8 ft. 6 in. and the wheels have a diameter of 3 ft. 6 in. They are of rolled steel and have separate tires. The usual type of clasp brake gear is used. The axle journals are 4 $\frac{1}{8}$  in. by 9 in. for all coaches. The kitchen cars, which are heavier, have 5-in. by 10-in. journals. The journal boxes have plain bearings, lubricated by spring-loaded pads. The boxes are cast iron.

The brake equipment is the automatic vacuum type, which has been standard practice on the main-line railways since the formation of the former four railway systems in 1923. The equipment consists of two 22-in. cylinders for each vehicle. Direct admission valves give accelerated brake applications.

#### Automatic Couplers

A feature of unusual interest is the use of central automatic couplers and Pullman type diaphragms. This is the first application of automatic couplers as standard for British passenger rolling stock. The former L. & N. E. used central automatic couplers for the passenger cars on the important express services on the main line and Pullman type vestibule connections between the cars, but all other companies used screw couplings and side buffers. Locomotives have always had screw couplings and buffers, and this equipment is used for the new standard locomotives now being built.

To permit the new standard rolling stock to interchange with cars having the older form of couplings during the transitional period, the automatic couplers will be of the drop-head type and the side buffers will

be retractable, being so designed that, when the couplers are engaged, they can be pushed in to clear each other when the coaches are coupled up. When the screw couplings are used, the buffers are drawn out and a saddle piece placed over the buffer shank behind the buffer head, thus making connection between the head and the buffering gear. The coupler heads are fitted with hooks to receive the links in the screw couplings.

One of the illustrations shows the coupler dropped clear of the hook, which is ready to receive the screw coupling shackle, and the side buffers drawn out in position to contact buffers of the adjoining vehicles.

#### Lighting and Heating

The lighting equipment, except on the kitchen cars, consists of a 70-amp. 24/32-volt axle-driven shunt-field generator with a regulator combining all the necessary switch gear as a unit, and a battery of twelve lead-acid accumulator cells, housed in two battery boxes on the underframes.

Compartment heating is by means of thermostatically controlled steam radiators of the grill-tube type, which can be regulated by the passengers.

The different types of coaches now under construction embrace (1) first-class side corridor compartment type; (2) third-class side corridor compartment type; (3) first and third composite cars of types (1) and (2); (4) third-class corridor compartment type with luggage compartment; (5) first and third-class corridor composite with luggage compartment; (6) open first-class cars; (7) open third-class cars; (8) dining cars, first class, and (9) dining cars, third class.

In addition, kitchen and pantry dining cars and kitchen and pantry (only) cars and brake and baggage nonpassenger carrying cars are being built.

As typical of the general outside appearance of the new standard cars, an illustration shows one of the first-class diners. This is an open car, known as Type H, and has seats for 42 passengers; there are seven tables, each with four separate chairs, on one side and seven smaller tables, each with two chairs, on the other side. Lavatory accommodation is provided at each end and there are two entrance doors on each side of this Type H car.

The loose chairs are of wood, finished to match the interior decorative panels. The seat fittings are of sponge rubber, covered with moquette. The fixed seats, as in the corridor compartment type cars, have fittings of wire mesh and spiral springs. The seats in the first-class cars have loose cushions, and the hinged arm rests between the seats and the head rests have sponge rubber fittings.

The outside doors and corridor compartment sliding doors have balanced frameless drop lights. Ventilation is effected by means of roof extractors and sliding ventilators over the side windows.

In general, the aim has been to produce comfortable accommodation with good lighting, heating and ventilation, combined with easy riding. Anything in the nature of elaborate decorations has been eliminated on account of cost.

The present plan is to build a total of 1,189 main-line corridor coaches of the new standard types, representing the first stage of standardization. The next stage, now in hand, will deal with non-corridor cars for steam and electric services. At the same time, new standard designs for sleeping cars, both first- and third-class, are in hand. The final stage will embrace standard types of non-passenger-carrying cars.

## Army Schooling On the B. & O.

*Members of the 729th Railway Operating Battalion, Fort Meade, Md., are participating in an intensive training program on the Baltimore & Ohio. The program permits trainees to "learn by doing," while regular B. & O. employees serve as teachers. The schoolrooms are the yards, shops and other B. & O. facilities at Baltimore, Md.*



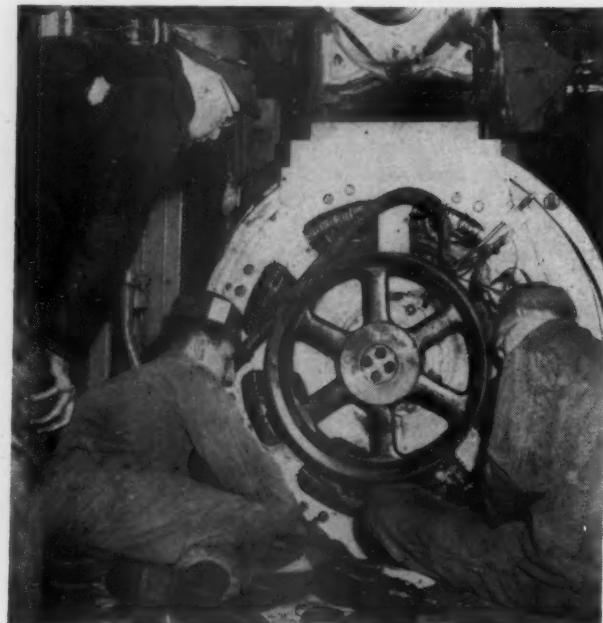
Army trainees learning proper track maintenance on the Washington-New York line of the B. & O. at Relay, Md.



An Army yard crew receives instructions from R. N. Barrett, B. & O. yardmaster, and Lt. Edward Mattler, assistant trainmaster of the 729th. Pfc. Leon D. Tichnor is in the cab, while others, from left to right, are Pfc. William V. Crabtree, Sgt. John H. Koella, Pfc. Joseph P. Deren and Cpl. Eugene A. Marsillo



R. E. Meseke, B. & O. chief dispatcher, holds a conference with Lt. Ray Olinger, who is head of dispatchers in the Army battalion



A diesel-electric generator gets an overhauling by a pair of Army electricians, Pvts. George Mohr and Ian Nelson. Walter King, B. & O. electrician, stands by ready to lend a hand



Men of the bridge-builder platoon help renew timber on Pier No. 8 at Locust Point, Baltimore. With them, in the center of the group, is Frank E. Jessup, a B. & O. bridgeman



A signal section of the battalion gets tips from William R. Carter, B. & O. telephone installer. Left to right: Pfc. Elmer C. Isis, Mr. Carter, Pfc. Albert C. Shanks, Lt. William Bayless, battalion signal officer, and Pvt. Robert S. Clay



Repair of freight cars is also a part of the training job. This group, headed by Captain Lincoln G. Perkins, a company commander in the 729th, is completing repair of a freight car truck



The yard crew, comprised of Pfc. Crabtree, Cpl. Marsillo, Pfc. Deren and Sgt. Koella, handles a cut of ore cars at Locust Point yard



Pvt. Donald Shannon, a locomotive mechanic in the 729th, making an inspection of a steam locomotive. He is accompanied by Theodore Reitz, a locomotive inspector at the Mt. Clare shops



Army train dispatchers, Sfc. Wilder Carpenter and Pfc. Loris Zinn, learn how to keep them on time and apart. T. Stevenson and P. S. Asker, B. & O. dispatchers, keep a close tab —just in case



The Great Northern's new Jackson Street car-paint shop which, in effect, was built around the special air-circulating system designed by the road in collaboration with the DeVilbiss Company

Employee Comfort Dictates

## Design of Spray Paint Shop for Cars



The workman at left is regulating a pressure tank while a painter puts finishing touches to a car with a spray gun

*Fast-flowing air currents induced by a special down-draft air circulating and cleaning system keep spray-gun spatter from workmen's faces*

In a new passenger-car paint-spray shop, which the Great Northern built recently at its Jackson Street terminal at St. Paul, Minn., workmen can spray-paint cars with comfort even without the protection of a mask. This is possible because the shop is equipped with a special down-draft air-circulating and cleaning system which causes air in the shop during painting operations to flow past the sides of the cars at speeds in excess of 125 ft. per min., keeping spray-gun spatter from the workmen's faces. The building is constructed of brick and glass block and was built expressly to house the air-circulating systems and spray-painting equipment, which was designed jointly by the Great Northern and the DeVilbiss Company.

Air enters the building through intakes, each 46 in. in diameter, located on the roof, and then flows through two cabinet-type air-replacement units which filter the air (also heating it during cold weather) and discharge it downward through the open top of a paint-spray booth that extends the full length of the building. After passing the sides of the car, where it picks up spray-gun spatter, the air flows through gratings in the floor of the

**Interior of the paint-spray booth.** Air enters at the top and flows downward into the gratings along each side and thence into washers. The scaffolding along each side can be adjusted to any desired height

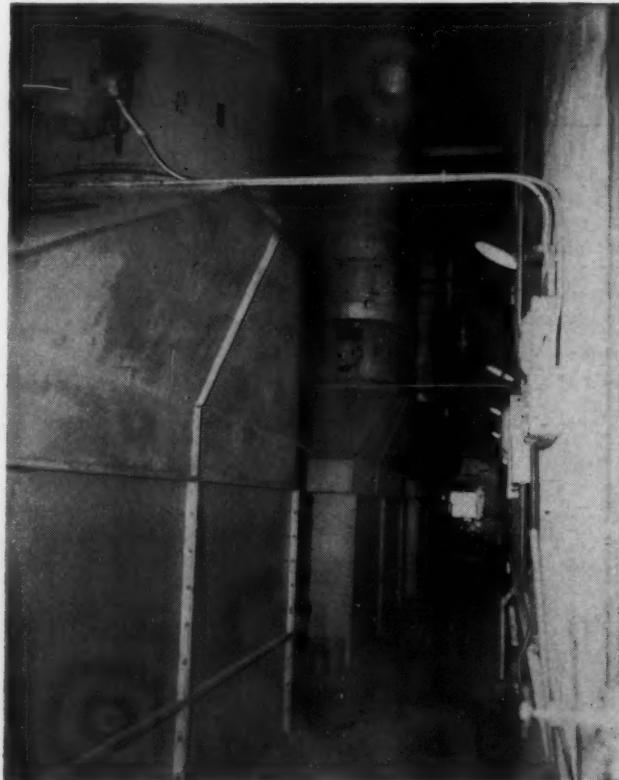


spray booth into eight air washers, where water sprayed by a system of nozzles removes the paint from the air. From each washer the cleaned air is exhausted through a roof stack by a 42-in. vaporproof fan made of non-ferrous material.

Controls are provided for the system which permit using at one time either the full length of the booth or any of three individual sections into which the booth may be divided. Thus, unnecessary heating is eliminated in cold weather if the work does not require full booth

capacity. Proper booth illumination is provided by thirty 500-watt vaporproof reflectors.

The shop is also provided with a ventilated pit running the full length of the building for spray painting the undersides of cars, and a special adaptor which is connected into the end door of a car to provide the necessary circulation when painting car interiors. Permanently installed along each side of the spray booth for its full length is open-grating metal scaffolding which can be adjusted to the desired height by chain hoists.

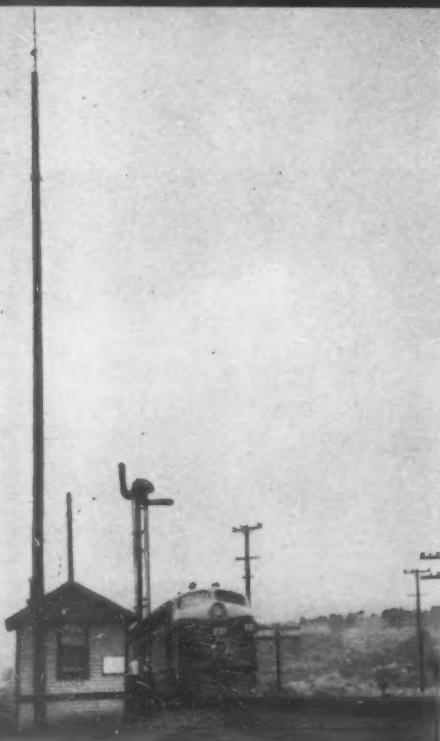


**Left—Between the walls of the spray booth and the walls of the building proper are located the eight exhaust units, four on each side. Each unit has a capacity of 12,500 cu.**



**ft. per min. Right—While painting car interiors air is blown through the car from this special adaptor connected into end door of car**

## Radio Saves Train Time on Coal Line



Radio is in service at eight wayside offices on the F.M.&P. subdivision

Voice radio has been put to work to control train operations over 70 miles of the F. M. & P. subdivision of the Baltimore & Ohio between Fairmont, W. Va., and Connellsburg, Pa. This is the first installation of radio for control of over-the-road operation on this particular road, although the B. & O. has a number of limited-range radio installations for control of terminal and marine operations. The F. M. & P. (Fairmont, Morgantown and Pittsburgh) subdivision is a heavy-tonnage stretch of single track, linking the coal producing areas of northern West Virginia with the B. & O.'s main line at Connellsburg. Use of radio is expected to increase materially the capacity of this single-track line, without the need for building additional sidings or double track.

The radio network consists of eight fixed stations in towers and yard offices along the right of way; 10 mobile units in locomotives; and 12 mobile units in

caboose. A number of walkie-talkie sets also are used for communication between members of the train crews and their engines and cabooses. The radio equipment was manufactured by the Bendix Radio Division at Baltimore. The broadcasting and receiving units are model number MRT-5B operating on 160.53 and 160.23 megacycles.

Initial reaction to the radio installation has been highly enthusiastic. Trainmaster J. L. Lowney, of Connellsburg, puts it in these words: "Railroaders run on information. The more information they have, the better the railroad you have. Radio gives them that information without any delay." The result, as he points out, is seen in greater efficiency in the movement of tonnage.

Use of the two-way voice radio has greatly cut down the length of time that freights have to spend on sidings, waiting for trains bound in the opposite direction to pass. With radio communications, the train crews can time their passings to permit minimum delays. The operator in each of the eight towers along the 70-mile right-of-way has a radio-telephone handset, in addition to his traditional telephone and telegraph equipment for communication with other operators along the subdivision. The radio receiver in each tower has a loudspeaker, so that the operator's attention can be attracted even though the handset is on the hook. Outside of each tower there is an 80-foot antenna.

Each locomotive also has a radio-telephone handset by the engineman's seat, and a loudspeaker which permits incoming radio messages to be heard by both the engineman and the fireman. Nine of the radio-equipped locomotives are diesel-electric; the tenth is steam. The diesels are used to haul freight trains over the F. M. & P.

route, while the steam engine handles the one local passenger train operated daily in each direction between Connellsburg and Grafton, W. Va., via Fairmont.

The caboose radio installations are primarily for use of freight train conductors, who also have a radio-telephone handset and a loudspeaker. In addition, the conductors are equipped with standard walkie-talkie or portable sets that permit them to maintain contact over short distances with the locomotive and the caboose while the train is stopped, and the conductor is "on the ground."

The radio equipment, except the walkie-talkie units, can be operated on either of two channels. One channel is regularly assigned to the mobile units, for the use of enginemans in locomotives and conductors in cabooses. The walkie-talkie units also are adjusted for this channel. The second channel is regularly assigned to fixed stations along the right-of-way. However, both mobile and fixed units can communicate with installations on the other channel by turning a simple channel switch.

The railroad telephone system along the route also can be tied in with the radio network. Thus, the train dispatcher for the B. & O. at Pittsburgh can, in an emergency, talk to the engineman of a train on the F. M. & P. subdivision 50 miles away or more, by telephoning to one of the tower operators on the F. M. & P. and having the telephone line cut into the radio system.

The radio equipment was installed by the B. & O.'s communications engineers, under the supervision of A. S. Hunt, chief engineer for communications and signals, and L. J. Prendergast, superintendent of communications. Cost of the installation exceeded \$75,000.

Enginemans on road trains use their radio to talk to their conductors and to operators at wayside stations

Right—Portable walkie-talkie radio sets are used by trainmen when walking along the trains





## How the Santa Fe Got Results with Diesels

*Early difficulties and later successes outlined by J. P. Morris, the road's general manager, mechanical, in paper before St. Louis Railroad Diesel Club*

Four factors which have contributed to the success of diesel locomotive service were discussed by J. P. Morris, general manager, mechanical, of the Santa Fe, in his paper before the St. Louis Railroad Diesel Club on June 12. These are improvements in the diesel-electric locomotive, itself, some of which were brought about by the insistence of the railroad; education of maintenance and operating employees; systematized servicing at suitably located centers; and the provision of adequate facilities at both maintenance and heavy-repair points. Mr. Morris also outlined certain problems with respect to electrical equipment of which solutions are not yet in sight. His paper, in part, follows:

In analyzing the accomplishments of diesel-electric locomotives on the Atchison, Topeka & Santa Fe, it is in order to review motive power conditions briefly. The Santa Fe at one time used 15 steam locomotives to handle a passenger train from Chicago to Los Angeles, Cal., 2,227 miles. Later, as more modern steam locomotives were developed, including high-pressure boilers, roller bearings, and tenders of larger fuel and water

capacity, the number of steam locomotives required to handle the same train decreased to two, and the train schedules were reduced from approximately 70 hours to 48 hours. This was accomplished by the elimination of fuel and water stops and the use of modern high-speed steam locomotives. Today, these same runs are made in 39½ hours, with one diesel-electric locomotive handling each train from origin to destination.

Advantage has been taken of test data and experience collected over a period of years to improve various parts of the diesel engine, increasing its reliability. For example, with old-style aluminum pistons, the Santa Fe was fortunate to get 50,000 miles of trouble-free service. Present floating cast-iron pistons operate for two years, at which time they are removed for inspection and returned to service. Many pistons have operated from 800,000 to 1,000,000 miles and are still in serviceable condition. Parts such as main crankshafts, crankshaft bearings, valves, cylinder heads, and radiators, have been improved and strengthened in proportion. In the design and improvement of cylinder heads and pistons, it was

necessary to keep in mind that they must be kept moderate in size so as to be easily handled.

By this time, the problem of interchangeability of parts was becoming quite serious with the railroads, especially with regard to maintaining an adequate stock of spare parts materials. This subject was vigorously handled with the builders. They cooperated and the results are apparent in that major engine parts are now interchangeable from the first engine through the various series of improvements.

On January 2, 1940, a four-unit 5,400-hp. Electro-Motive freight locomotive was loaned by the manufacturer for a test. Dynamometer car tests were conducted with satisfactory results which led to the Santa Fe's acquisition of the first four-unit 5,400-hp. freight locomotive and subsequently to 80 more locomotives of the same type.

#### The Electric Brake

Information that had been collected in operation over heavy-grade territory indicated that if an electric brake could be incorporated on the locomotive, a large saving would be realized. The first five four-unit, 5,400-hp. diesel locomotives delivered to the Santa Fe during 1940 and 1941 were equipped with a two-stage electric holding brake, utilizing the resistance of the traction motors as a retarding medium. This brake was not entirely satisfactory and was replaced on following locomotives with a variable-range brake that is easy for the engineer to operate and to control the rate of braking depending on the speeds and tonnage being handled.

Utilization of the electric brake has brought about a large saving in damaged wheels, as well as reducing brake beam failures, and has eliminated many stops for wheel cooling which were formerly made.

Tests were later conducted to determine the effectiveness of the dynamic brake in passenger-train service, and it was found that 1,783 lb. of brake shoe metal can be saved in one trip over the railroad between Chicago and Los Angeles as well as reducing thermal cracking of wheels, both on locomotives and cars, by fully utilizing the dynamic brake, only using the air brakes as a supplement.

The original 5,400-hp. freight locomotive was designed with permanent drawbars between the lead and booster units, an arrangement that was not favorable for general operation or utility. In visualizing operations we knew that it would not be possible to set out a unit permitting remaining units to handle the train through to destination, and that to use locomotives in multiples of three units would not give the flexibility that was required. For those reasons we insisted on the adoption of automatic couplers between all units instead of drawbars. Our judgment proved sound which is evinced by the fact that the builders universally have adopted this type of connection between units.

The eighty 5,400-hp. freight locomotives acquired in 1942 to 1944 comprised the largest fleet of locomotives in service at that time and was the first real test of the diesel-electric locomotive in mass quantity eliminating steam operation in heavy mountain service, and proved conclusively the availability and economy inherent in this type of locomotive. These locomotives were a major factor in handling war materials to the Pacific Coast and played their part in winning World War II.

The operation of diesel-electric locomotives in passenger service over heavy-grade territories made it apparent that traction motors of increased thermal capacity were necessary; and since the traction-motor location

space is restricted, our thoughts gradually turned towards a design having an increased number of traction motors per locomotive.

During 1946, we converted ten 5,400-hp. four-unit freight locomotives to passenger service in the San Bernardino shops. This type of locomotive had 16 traction motors available as compared with 12 on the then current 6,000-hp. passenger locomotives. The increased thermal capacity resulted in elimination of helper service over mountainous territories. This conversion was also another step in the ladder of progress, as these locomotives were equipped with the first Vapor 3,000-lb. steam generators.

In view of the performance of these ten locomotives, all 6,000-hp. four-unit E.M.D. passenger locomotives placed in service since that time are similar in design and appearance, also using 16 traction motors.

The present steam generators which produce 4,500 lb. of steam per hour and occupy practically the same floor space as the original 1,600-lb. steam generator first used on the Santa Fe were the result of vigorous handling with the manufacturers to build a larger steam generator. The change in design and the reliability has been accomplished through the cooperation of the railroads and the manufacturers who, with railway maintenance forces, are striving to improve still further the dependability of steam generators on all railroads.

In the operation of diesel locomotives handling increased tonnage, consideration was not given at first to the necessity of having increased fuel and water capacity, which resulted in taking fuel and water at intermediate stations causing additional delays and dissatisfaction. In order to properly handle Santa Fe trains without delay we enlarged the fuel and water tanks to meet service requirements. As a result the manufacturers have adopted larger capacity fuel and water tanks.

#### Control Circuit

One of the major difficulties resulting in road delays and failures is erratic operation of control circuits, generally caused by dirt, moisture and oxidized contacts. Complicated, fragile and sensitive relays cause mechanical failures of electrical equipment. Complicated wiring circuits, contaminated from dirt and moisture entering the high-voltage cabinets, contribute greatly to this trouble. The manufacturers have not yet designed high- and low-voltage cabinets which are dirt- or moisture-proof, and in our opinion further research is necessary so that the cabinets can be sealed and opened only at the time of monthly inspection for cleaning and maintenance.

Another source of trouble with traction motors, well known on every railroad operating diesel power, is the frequency of moisture grounds and armature bearing failures.

This condition is brought about primarily by distortion of the frame and bearing housings, which are structurally so weak that they distort and get out of alignment when in service on the road. This results in misalignment of the armature roller bearings, taking up the running clearance of the bearing, resulting in shortened life and failures.

The Santa Fe has in progress a test of 147 traction motors, which is being carried on with the builder, testing out various types of armature bearings and various changes in construction and design of armature bearings, as well as testing grease and oil lubrication. The grease-lubricated traction-motor bearing assemblies are sealed so that no lubrication can be added between

inspection periods. These motors are removed at various mileages and dismantled and data collected on each motor.

The traction-motor gear cases have given considerable trouble due to leakage of the gear lubricant which reduces locomotive availability as it is necessary to add lubricant to the gear cases at too short intervals in comparison to other servicing required. There has been little, if any, improvement in this phase with the progress of the diesel.

### Servicing 1,092 Diesel Units

The following is a statement of the number of diesel locomotives in service on the Santa Fe, as of June 12, 1951, exclusive of units to be delivered during the balance of the year: Freight units, 556 (786,000 hp.); passenger units, 192 (320,600 hp.); switcher units, 256 (254,710 hp.); general-purpose units, 67 (109,400 hp.); combination passenger and freight, 21 (31,500 hp.); total units, 1,092 (1,502,210 hp.).

Locomotives received and to be delivered during 1951 total 207 units, with space set aside for 135 units next year.

Four major terminals handle the maintenance, servicing and overhaul of the bulk of this fleet of diesel-powered locomotives:

(1) *Barstow, Cal.*—Located as a hub, this is our largest modern shop for handling current repairs on 501 units. Freight locomotives are dispatched north to Oakland, Cal., 461 miles; south to San Bernardino, Los Angeles and San Diego, 81, 150 and 265 miles, respectively; and east to Clovis, N. M., 970 miles. Locomotives return to Barstow for maintenance after operating approximately 5,000 miles.

Passenger locomotives are operated from Los Angeles to Chicago, to Galveston, Tex., to Chicago and back to Barstow for maintenance. Other locomotives are also relayed to Houston and Clovis to Chicago, returning to Barstow, accumulating a maximum of 7,800 miles per round trip.

(2) *Cleburne, Tex.*—Located on the southern part of the railroad, this shop handles current repairs and maintenance as well as annual inspection and heavy overhaul for approximately 210 freight units and 20 switchers. The freight locomotives are operated south of Cleburne to Bellville Yard, 211 miles; north to Chicago, 1,068 miles, and some units operate north and south out of Cleburne, making a complete circle from Cleburne to Argentine, LaJunta, Denver, and Sweetwater, returning to Cleburne, approximately 2,463 miles. These freight units receive monthly inspection at Cleburne and semi-monthly inspection at Argentine.

(3) *Argentine, Kan.*—This shop handles running maintenance consisting of semimonthly inspection on the above-mentioned 210 units, in addition to 11 assigned units and 35 switchers. We have authority to erect a \$3½-million modern heavy-repair and maintenance diesel shop at Argentine, for completion in 1953, with capacity for handling 600 units which will be required when that territory is completely dieselized.

(4) *San Bernardino, Cal.*—Formerly one of the largest steam locomotive repair points, this shop has been converted to handle general overhauling, repairs and annual inspection of complete diesel locomotives and component parts which includes rebuilding diesel engines of all sizes and makes. This installation also includes a modern electric shop, having a floor area of 27,000 sq. ft., equipped for rewinding main generators, traction motors and intermediate sizes of armatures including



the welding and remachining of motor frames, etc. Some of the smaller sizes of coils, for small motors and other equipment, are manufactured in this plant. The production rate in this shop is approximately three units for a working day, at its present capacity.

It is interesting to note the great progress which has been made in the repair of diesel locomotives. One phase of this is the application to, and building up of, various surfaces by a metalizing process.

During the operation of earlier diesel engines, and in many instances present-day diesels, we have had difficulties with crankshaft failures. This was especially serious at first with a limited number of diesel locomotives in service, and these generally assigned to preferred trains, with schedules tightened up to the point where a steam locomotive could not meet the requirements. As a result many tools were developed for performing operations quickly and efficiently.

With the above outline of major maintenance terminals, it is noticeable that advantage has been taken of the ability of the diesel locomotive to operate for extensive mileage periods for running repairs, maintenance and general overhauling by centralizing the running repair, routine maintenance inspection and the general overhauling of the equipment, thus eliminating a considerable investment in facilities.

When consideration was being given to the application of diesel locomotives as a prime-mover on the Santa Fe, it was apparent to the management that it would be necessary to set up a special organization for handling

this work, functioning under the direction of the general mechanical assistant. The position of supervisor of diesel engines was established September 1, 1935, to follow the field work covering maintenance, operation, changes in design, and so forth.

During the early operation it was necessary for the builders and the Santa Fe to have men in the field to take care of defects as they arose, particularly because the mechanical department was at that time generally a steam organization. These men were classified as diesel maintainers, coming from both the electrical and mechanical crafts, and later this service was expanded to include regular riding of passenger and freight locomotives. In time, with improvements and development of the diesel

locomotive, special diesel-maintainers were not required. At one time, in the field, there were 158 diesel maintainers regularly riding diesel freight and passenger locomotives on assigned runs.

#### Educating the Personnel

Although much of the credit for improvement in service lies in design and material improvements in locomotives, major credit for the successful operation of diesel locomotives rests with the maintenance organization.

Proper tooling facilities and the organization of personnel that operate these facilities, contribute a major share in reducing the necessity for road maintenance service.

Another contributing factor in successful diesel operation is the education of railroad personnel, both in operation and maintenance of diesel locomotives. This has been carried on effectively on the Santa Fe by the construction of our own diesel instruction car. Since 1946, when the instruction car was completed and classes conducted by our own instructor, there has been approximately 23,000-man class attendance. We have, from time to time, changed the equipment in the diesel instruction car to give our people the benefit of the latest developments and modern electrical equipment used on the railroad. Over 15 years operating and maintaining diesel power have resulted in developing a diesel folio which it took five years to complete. This folio covers all phases of diesel work and is a guide to our forces in making repairs. It is continually changed as improvement in the art requires.

The Santa Fe diesel organization has proved to be a training field for young men desirous of gaining knowledge with respect to the maintenance and operation of this type of motive power, and presents unlimited opportunities for those who merit further promotion. As a testimonial to this vast organization, those who started in the diesel organization early are now holding positions of responsibility and trust including roundhouse foremen, supervisors of diesels, master mechanics, superintendents of shops, and mechanical superintendents.

It has been a pleasure, indeed, for me to have had a small part in the building of this organization. We must acknowledge the vision and courage of our president and executive officers in financing the acquisition of diesel power and providing efficient facilities and tools to insure that the availability of this type of power is fully utilized.



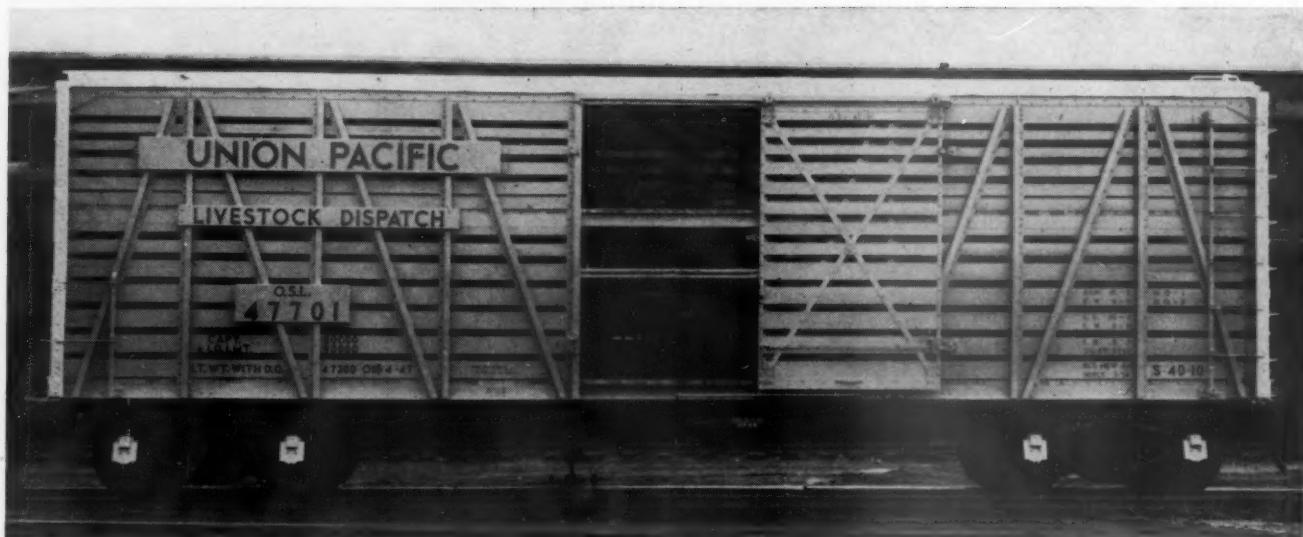
A Penn State Traffic Management class standing by the Bellefonte Central caboose. Third from left is Professor Stonier, and fourth is Dr. Waters, both of whom are members of the school's faculty

#### "Laboratory Work" in Traffic Management

Students of traffic management at Pennsylvania State College do not learn all their transportation from textbooks. In addition to their class work and visits to nearby industrial plants, they have at hand a railroad to serve as a practical laboratory. The Bellefonte Central is an 18-mile independent short line, running from State College to Bellefonte, where it connects with the Pennsylvania, and through the cooperation of George McClelland, vice-president and general manager, the transportation students at Penn State learn firsthand the problems of handling freight from the railroad point of view.

A recent inspection trip was arranged by Dr. R. Hadly Waters, who is in charge of the transportation work in the Department of Economics and Commerce at the college, and it began with a visit to the railroad's general offices in Bellefonte. After a detailed explanation of all the office work of the road, the students proceeded to the yards to observe the physical handling of the freight. Then an extra caboose was added to the daily freight train, and they made the trip to State College. For some of the students, this was their first train ride! The tour ended with a study of the work in the freight house at the State College terminal of the line. A special feature of the trip was an arrangement by the men in the Bellefonte office of a demonstration shipment, billed at Bellefonte and delivered at State College.

"For years, till 1941, the Railway Labor Board was looked upon as an almost ideal institution, solving the rail wage rates with model harmony and efficiency. Then, beginning in 1941, railway labor got dissatisfied with the altitude of the raises it was gleaning in this orderly way, so it carried its demands past the board to the White House. And that's where all the big labor disputes since then have wound up. This would not perhaps be worth mentioning except that every fact-finding board set up by a President has wagged its way into awarding labor a far larger slice of its original demands than orthodox collective bargaining could ever have won. Under such circumstances, railway management at the bargaining table is roughly in the same position as the turkey at the dinner table."—From an article by Ira U. Cobleigh, in the *Commercial & Financial Chronicle*, June 14.



One of the Union Pacific's new "livestock dispatch" cars, inside length 40 ft. 7 in., inside width 8 ft. 10 in., inside height floor to plate 9 ft. 2 in. (most of these cars have 9-ft. 4-in. inside height which allows 5 ft. 4 in. from floor of lower deck to under side of upper deck and 4 ft. 1 in. in clear in upper deck). Light (yellow) painted journal boxes indicate car is Timken roller bearing equipped. These cars

also have new type bolster snubbers to prevent bounce at high speeds, new type cushion draft gear and automatic slack adjuster to absorb better the shock of stopping and starting, high speed steel wheels similar to those on passenger cars, new type steel tubing door bar with "stay-put" slots to hold door bar at both ends, aluminum painted ends and roof to deflect sun heat and keep cars a few degrees cooler

## Union Pacific Presses Campaign To Reduce Livestock Loss and Damage

**Overall freight loss and damage payments down 31.1 per cent in 1950 from record 1948 high**

The Union Pacific's all-time high cash payment for freight loss and damage in 1948 was cut 31.1 per cent by the end of 1950, according to a recent compilation of the road's general claims department. In claims submitted, the reduction was 32.1 per cent from the all-time high year of 1947 to the end of 1950. This whittling down of the U.P.'s bill for freight loss and damage has been carried out under the direction of O. J. Wullstein, general claims agent at the road's Omaha, Neb., headquarters.

With further overall reduction as the objective, the U.P. this year is directing special attention toward safe shipment of livestock. The current emphasis on prevention of livestock losses was planned as a move to keep abreast with the work of the expanded and intensified efforts of the reorganized National Live Stock Loss Prevention Board, now known as Livestock Conservation, Inc., with headquarters in Chicago. The Union Pacific has cooperated in the livestock loss prevention program ever since the inception of the original board in 1934. Earle G. Reed, U.P. general livestock agent, was board chairman from 1934 through 1937, and a director and member of its executive committee from 1934 through 1949.

Latest available statistics on the U.P.'s freight claim

payments on livestock appear in the table on page 42.

The road's campaign to reduce mortality, crippling and bruising of livestock in transit is advancing on five fronts. First is the matter of "ground roots" education of railroad employees handling livestock. At each terminal a freight loss and damage prevention committee has been established. These committees meet frequently to solve problems which may arise and to consider ways to combat waste more effectively. Such committees are usually headed by a trainmaster or a yardmaster and include both company officers and employees. At each station of any size, meetings of all freight handlers are



O. J. Wullstein

Earle G. Reed



**Left—Standard single-deck 40-ft. 7-in. car of the type being reconditioned at the U.P.'s Denver shops. Right—Loading**



**1,000-lb. cows in lower deck of U.P. livestock dispatch car. Note ample head room**

called from time to time to discuss specific instances of loss or damage and the subject of prevention in general. Meetings are on company time and are usually called by the local agent at his discretion.

Once each month a complimentary dinner meeting is called on each of the Union Pacific's seven divisions. The site is rotated among key points of each division. Held in the evening, under the direction of the respective division superintendents, these meetings, attended by staff officers, freight handling employees and by the chairman and possibly other members of the terminal committees within the division, have been found to be particularly effective for reaching large numbers of employees.

Another effort of the five front program involves the eight freight service inspectors on Mr. Wullstein's staff and the six livestock agents of the freight traffic department. These men, constantly on the move along the U.P.'s line, give special attention to the condition of railroad stockyards and rolling stock. They note and report broken boards, protruding bolts and nails and similar defects which may cause injury to animals. On the basis of their observations and recommendations, plans are drawn for improvements in the construction of stockyards.

The third and fourth points in the campaign are multi-million dollar stock car projects. The last 300 of an order for 1,000 roller-bearing, double decked, 40-ft. 7-in. livestock dispatch cars were completed at the Denver shops last September. Each of the cars cost \$5,032. (The present unit cost of "ordinary" 40-ft. 7-in. double-decked stock cars is \$4,695, the U.P. reports, compared with the 1942 cost of about \$3,200.) In addition, over 1,300 of the road's stock cars will be reconditioned. This work began at the Denver shops on December 1, 1950, and up to mid-June 1951 253 cars were turned out and put

back into service. The reconditioning work will continue until the cars are completed, which will be as rapidly as the necessary materials can be secured and the repair gang of about 45 men assigned to the job can do it. Varying with individual requirements, these cars are being fitted with new trucks, decks, sides, roofs and structural members.

Provided materials can be obtained, 500 additional new double-decked stock cars, without roller bearings, are scheduled to be completed at the Omaha shops and in service by next October 20. Five hundred more single- and double-decked stock cars have been authorized for construction in the first quarter of 1952.

The fifth point in the five-phase program is the distribution the railroad is making of 25,000 booklets entitled "Livestock." For general distribution, this 64-page booklet features 81 illustrations and was prepared by the U.P.'s agricultural development department as an aid for the livestock industry. Two of the booklet's five chapters are devoted to livestock shipping and loss prevention. Another booklet, "Livestock Shippers Guide and Directory," has been prepared by Mr. Reed's office for limited distribution to livestock shippers, processors, packers, buyers, commission firms and stockyards. Copies also have been given to all U.P. local agents, freight traffic representatives, operating and freight claim officers and supervisors.

Class of Stock	No. Cars Handled		Claim Payments		Average Claim Payment per car	
	1950	1949	1950	1949	1950	1949
Horses & Mules	2,345	2,475	\$6,865.06	\$8,203.79	\$2.93	\$3.31
Cattle & Calves	46,309	48,655	94,621.70	131,427.68	2.04	2.70
Sheep	22,630	22,411	50,742.91	46,655.33	2.24	2.08
Hogs	17,624	16,149	96,909.47	164,493.20	5.50	10.19
Totals	88,908	89,690	\$249,139.14	\$350,780.00	\$2.81	\$3.91

# GENERAL NEWS

(Continued from page 25)

Other discussions at the conference brought forth the prediction that production of pressure tank cars will be five months behind schedule by October. Steel allocations made by N.P.A. contemplate an 850-car monthly schedule, but the conference was told that the builders cannot find enough steel. The conference also discussed the possibility of increasing utilization of the present fleet by adoption of measures to "eliminate cross-hauls."

## Omnibus Transport Bill Introduced in Senate

A comprehensive rewriting of the Interstate Commerce Act, and modifications of those provisions of the Internal Revenue Code which relate to taxes on amounts paid for transportation service, are proposed in a bill introduced last week in the Senate by Senator Johnson, Democrat of Colorado. Mr. Johnson, who is chairman of the Senate Committee on Interstate and Foreign Commerce, introduced the bill, S. 1889, "by request."

In response to an inquiry, the senator explained that the introduction was at the request of Hugh C. McCarthy, who was formerly a member of the committee's staff. Since leaving the committee, Mr. McCarthy has completed work on the bill which he began while a member of the staff, Senator Johnson said.

The bill has "no other significance," the senator also said, indicating that it enjoys no sponsorship at this time from him, the committee, or the committee's present staff. Meanwhile, the staff is still at work drafting legislative proposals based on the comprehensive investigations conducted last year. Whether or not such proposals will be offered piecemeal or embodied in an omnibus bill has not been determined.

## U. S. Chamber Proposes \$1 Million Highway Study

A million-dollar study of the nation's highway financing needs was proposed by Harold F. Hammond, manager of the Transportation and Communication Department of the Chamber of Commerce of the United States, when he spoke recently in Chicago before the annual meeting of the Truck-Trailer Manufacturers Association. Mr. Hammond said that "a universally accepted answer" must be developed soon as to how much each type of highway user should pay of the money needed "to bring America's roads into proper shape."

"No matter how the highway financing problem is approached," Mr. Hammond said, "the answer eventually

centers on the need for more user revenues, such as registration fees and fuel taxes, to do the job. The national chamber recognizes the fact that highway users should pay the larger part of the cost of highways in general use, namely, the primary road system. The contributions of highway users to the cost of building and maintaining highway systems should be through collection of special taxes or fees based on logical standards reasonably commensurate with the value of the use."

The public's readiness to support toll roads is evidence that it is willing to pay for better roads, Mr. Hammond declared, adding that the chamber "did not object" to toll roads where no other financing method is

available. He also said that the contribution of the federal government to highway costs should never exceed the traditional 50 per cent.

## Strikes Close 3 Plants Of Pullman-Standard

Strikes called by the United Steelworkers of America (C.I.O.) have closed plants of the Pullman-Standard Car Manufacturing Company at Butler, Pa., Bessemer, Ala., and Hammond, Ind. A company spokesman has estimated that the strikes will affect about two-thirds of the firm's total freight car output—the other third being accounted for by the Michigan

## News Briefs . . .

. . . The Milwaukee has established a university scholarship to be awarded each year to the son of an employee. It will be known as the J. T. Gillick Scholarship, in honor of James T. Gillick, of Chicago, who retired in May 1948 as vice-president in charge of operations following 62 years of service with the road. Successful contestants will attend universities of their own choice.

. . . A Geiger counter has been purchased by the Chicago & North Western to "supplement its efforts in development of natural resources." Representatives of the land, research, industrial development and agricultural departments will use the counter on various lands in Illinois, Iowa, Wisconsin, Minnesota, Michigan, Nebraska, North and South Dakota, and Wyoming in a search for possible sources of uranium and other radioactive ores.

. . . The Boston & Albany recently extended its rail diesel car "Bee-liner" service to Albany. One 400.8-mile round-trip is made daily. Previously, the service was available from Boston only as far as Springfield, Mass.

. . . Some 60 traffic sales representatives of the Soo Line have just completed a traffic "school on wheels" wherein they studied sales methods, rates and the physical facilities of the railroad and its shippers during a six-day, 2,050-mile tour. Regular lecture and study periods were conducted during the entire training period.

. . . Gallatin Valley Inn, the Milwaukee's hotel located just north of Yellowstone National Park, at Gallatin Gateway, Mont., has been sold to Paul Holenstein, a Butte business man, who has begun to operate it on a year-round basis. As a railroad facility, the hotel could be feasibly operated only during the 85-day Yellowstone Park season—too short a time to bring any kind of a return on the Milwaukee's half-million dollar investment in the buildings and grounds. Mr. Holenstein plans to cater to motorists and to

residents of Bozeman and other nearby centers, as well as to passengers from the Milwaukee, in his efforts to run the hotel on a 12-month basis. None of the arrangements whereby Milwaukee passengers have been transported to, and accommodated at, the inn are changed in any way.

. . . Bangor & Aroostook shops at Derby, Me., have just delivered to the General American Transportation Corporation the first of a lot of 25 stock cars which are being rebuilt at Derby into refrigerator cars under a trial order placed with the B. & A. shops by General American.

. . . "The Laker"—the Soo Line's newly named train between Duluth-Superior and Chicago—stems from termination of the passenger pool agreement with the Chicago & North Western which had been in effect since July 1, 1933. Diesel power has permitted a speed-up in the schedule and the renovated equipment includes a complete selection of sleeping accommodations, including roomettes, bedrooms, sections, drawing rooms and compartments; a full-length dinette-lounge, and reclining seat coaches. Since it is not a streamliner, Soo Line employees have been urged to "sell" the train to the public on the basis of "what's inside the train makes the difference," i.e. modern accommodations and courteous employees. The name "Laker" was picked not only because both terminals are Great Lakes port cities, but also because of the myriad of inland lakes that dot the intervening landscape. Sections of the train also serve Ashland, Wis., and the Twin Cities.

. . . Land and buildings at Kingsland, N. J., formerly occupied by car and locomotive repair shops of the Delaware, Lackawanna & Western, have been sold by the railroad to Benedict-Miller, Inc., a steel fabricating and warehousing firm, and to the Hudson Wholesale Grocery Company, of Jersey City, N. J. The sale, at an undisclosed price, reportedly involves about 15 acres of land and buildings with a total of some 215,000 square feet of floor space.

City, Ind., plant which is now operating on a 60-day supply of parts previously fabricated at Hammond and elsewhere.

In June, prior to the strikes, the Butler, Bessemer and Michigan City plants had combined to top all previous company production records with an output of 3,066 cars. In recent months the Michigan City plant has averaged about 1,200 cars a month and the Bessemer plant did likewise until it closed down on July 2. The Butler plant had been averaging about 800 cars a month — most of them larger cars not so easily adaptable to rapid assembly line techniques — when it closed down the same day. The Hammond plant, which closed down a few days later, supplies wheels, car doors and ends, etc., for the other plants.

The immediate outcome of the strike is not clear, nor can its ultimate affect on freight car production be forecast. The company has a two-year contract with the union which provides for possible renegotiation of general and uniform rates of pay only in 1951. The company has declared itself willing to enter negotiations with the union on these questions, but the union has injected demands which reach far beyond the permissible bargaining area specified by existing contracts, Champ Carry, president of the parent Pullman, Inc., has stated. "Upon the company's refusal to bargain on these non-contractual demands, the union has proceeded to call its members out on strike," Mr. Carry said.

A meeting called by the federal conciliation service to iron out the dispute was ignored by the union. No violence had been reported at any of the plants as of July 23.

### Freight Car Loadings

Loadings of revenue freight in the week ended July 21 totaled 804,570 cars, the Association of American Railroads announced on July 26. This was

### FISHER TO SUCCEED BROWN ON READING

**Effective September 1, Joseph A. Fisher, executive vice-president and formerly vice-president in charge of freight traffic of the Reading, will become president of that company, succeeding R. W. Brown, who will retire from the presidency on that date, after 50 years of railroad service and seven years as president of the Reading.**

an increase of 25,116 cars, or 3.2 per cent, compared with the previous week; a decrease of 25,506 cars, or 3.1 per cent, compared with the corresponding week last year; and an increase of 86,054 cars, or 12 per cent, compared with the equivalent 1949 week.

Loadings of revenue freight for the week ended July 14 totaled 779,454 cars; the summary for that week, as compiled by the Car Service Division, A.A.R., follows:

REVENUE FREIGHT CAR LOADINGS			
For the week ended Saturday, July 14, 1951			
District	1951	1950	1949
Eastern .....	128,426	135,702	128,363
Allegheny .....	161,719	157,233	138,974
Pocahontas .....	55,792	56,491	42,099
Southern .....	119,912	117,168	102,815
Northwestern .....	131,886	138,584	134,564
Central Western .....	121,466	121,212	120,636
Southwestern .....	60,253	63,016	56,732
Total Western Districts .....	313,605	322,812	311,932
Total All Roads .....	779,454	789,406	724,183
 Commodities:			
Grain and grain products .....	51,232	58,828	79,758
Livestock .....	7,318	6,938	8,907
Coal .....	120,910	128,285	100,202
Coke .....	15,930	14,380	8,466
Forest products .....	42,634	46,362	35,809
Ore .....	88,699	89,076	83,896
Merchandise l.c.l. ....	68,702	76,686	84,403
Miscellaneous .....	384,029	368,851	322,742
July 14 .....	779,454	789,406	724,183
July 7 .....	588,246	553,910	595,321
June 30 .....	821,615	783,520	644,182
June 23 .....	832,942	809,971	802,941
June 16 .....	826,239	805,876	649,351
Cumulative total 28 weeks ....			
	21,285,104	19,228,066	20,056,586

In Canada.—Car loadings for the

week ended July 14 totaled 82,896 cars, compared with 72,182 cars for the previous week and 78,115 cars for the corresponding week last year, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
July 14, 1951	82,896	29,715
July 15, 1950	78,115	28,889
Cumulative totals for Canada:		
July 14, 1951	2,204,568	985,554
July 15, 1950	2,023,741	856,785

### Truck-leasing Rules Delayed a Month

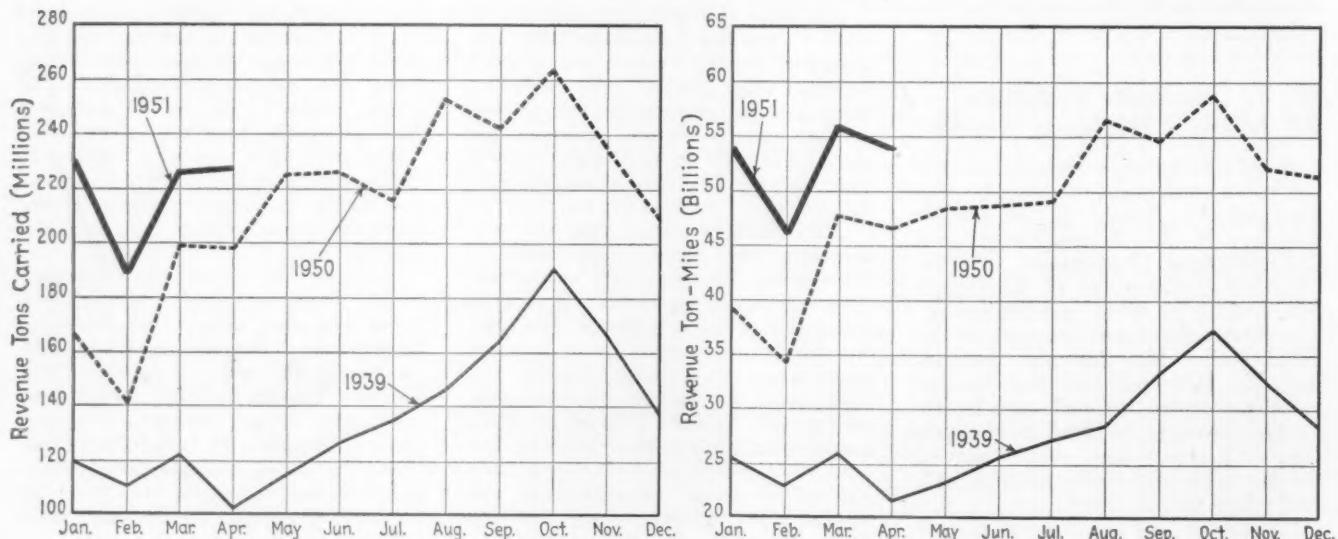
The Interstate Commerce Commission has postponed from August 1 to September 1 the effective date of its recent order prescribing rules to govern the leasing and interchange of vehicles by common and contract truckers. Petitions for reconsideration or modification of the rules have been filed with the commission by several interested parties, including American Trucking Associations. (*Railway Age* of May 28, page 61).

### Agencies Agree on Role Of Port-Use Committee

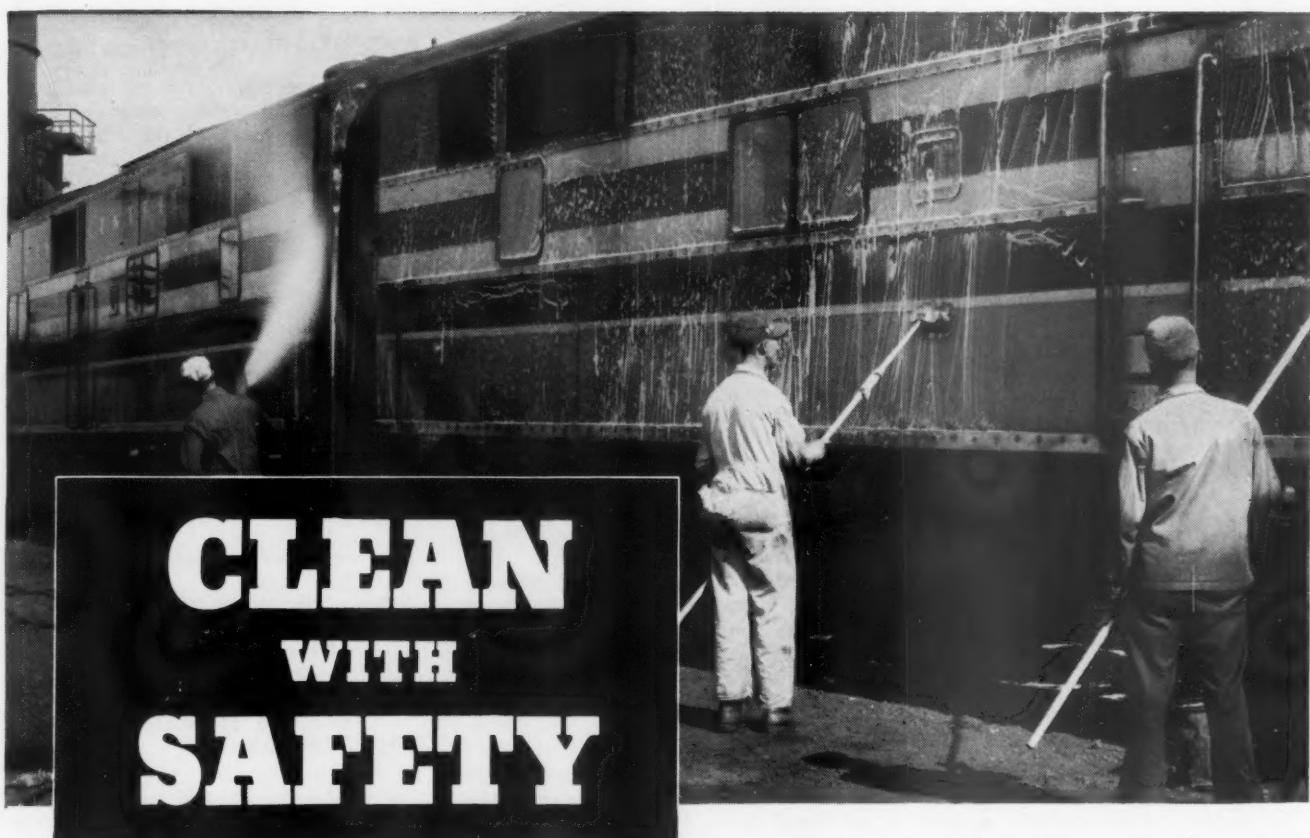
Functions to be performed by a recently formed Interagency Committee on Port Utilization have been agreed upon by interested agencies, which are the Defense Transport Administration and the Departments of Defense, Commerce, and Interior. The agreement was announced by D.T.A. Director James K. Knudson, who is the committee's chairman.

The committee "was set up to provide convenient and effective procedures for cooperation among those government departments and agencies which are concerned with port utilization," the Knudson announcement said. It went on to list the committee's functions as follows:

"To analyze requirements for port facilities; to examine their utilization



REVENUE TONS AND REVENUE TON-MILES—1951 compared with 1939 and 1950



# CLEAN WITH SAFETY

## Eliminate equipment damage with economical, corrosion-free DEARBORN cleaners

Remove dirt and grime . . . leave equipment bright, sparkling . . . without danger of subsequent corrosion. Dearborn cleaners work in any water, are free-rinsing, leave no streaks, contain no abrasives.

**■ EXTERIOR CLEANERS.** Contain non-streaking and sheen-producing agents. Formulated to keep painted, lacquered and polished metal surfaces sparkling new.

**■ INTERIOR CLEANERS.** Detergent and solvent type materials for interior cleaning of Diesel locomotives, passenger and baggage cars, roundhouses and offices. Designed for safety and economy.

**■ ORGANIC SOLVENT TYPE CLEANERS.** For cold cleaning of Diesel parts and filters at terminals lacking heating facilities. Also for cleaning Diesel trucks, Diesel locomotive interiors, traction motor gears, steam locomotive running gear, etc., where excessive oil and grease are present.

**■ HOT TANK CLEANERS.** For use on steam locomotive side rods, wheels and other parts that become heavily coated with grease and dirt. Also long life materials for cleaning air filters, oil and sintered bronze filters and specialized formulas for non-ferrous metals.

**■ ELECTRICAL PARTS CLEANERS.** A special solvent of low toxicity for spray cleaning of electrical cabinet interiors, relays, motor windings, other electrical equipment. Removes tarnish and oily film. Will not harm insulation.

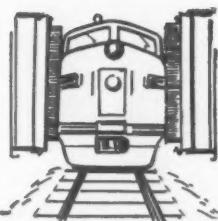
**■ SCALE REMOVER CLEANERS.** For removing scale from Diesel cooling systems with acid pump. A ferrous cleaner, it may be safely used for cleaning units constructed of copper, bronze, brass or their alloys.

Please note our new address

**DEARBORN CHEMICAL COMPANY**  
Merchandise Mart Plaza • Chicago 54, Ill.

**Dearborn**  
TRADE MARK REGISTERED

THE LEADER IN WATER TREATMENT AND RUST PREVENTIVES



Dearborn cleaners are designed for use with the most modern equipment such as this mechanical car washer.

### WRITE FOR COMPLETE INFORMATION

—Call your Dearborn Engineer or write for complete information on how to "Clean with SAFETY."

Dearborn Chemical Company  
Merchandise Mart Plaza, Dept. RA  
Chicago 54, Illinois

- Send complete information on Dearborn Cleaners  
 Have a Dearborn Engineer call

Name.....

Railroad.....

Address.....

City..... State.....

(except for government owned or operated facilities while operated by any of the armed forces); to consider (upon request) their continued use by any government agency; to make recommendations to the agencies concerned for their coordinated use; to make recommendations of regulatory orders concerning the use of ports; and to recommend to the appropriate agency action to be taken to increase efficiency in the use of port facilities."

"Each department or agency party to the agreement," Mr. Knudson also said, "will submit to the . . . committee . . . any plans it may have to use, occupy, build or acquire port facilities; and will submit to the committee any proposal to increase the traffic flow or alter the manpower situation in the operation of any port. Each department or agency agrees to observe all recommendations of the committee except when such a recommendation seems inconsistent with its recommendations; in this case, the chairman is to be notified and the matter brought before the committee for settlement."

### H. & M. Suit for Fare Rise Denied by Court

The Hudson & Manhattan's request for an injunction against the Interstate

Commerce Commission's suspension of an order granting the road authority to increase its trans-Hudson river fare from 15 cents to 20 cents has been denied by a three-man Federal Statutory Court (*Railway Age*, July 2, page 35). The increase, which was to have gone into effect May 13, was suspended on May 11 by the I.C.C. pending public hearings, which are now in progress.

### RRs Set to Handle Record Northwest Grain Crop

Despite disastrous floods in the southwest grain region which have retarded normal movement of box cars, the nation's railroads are set to handle what is expected to be an all-time record grain crop for the northwest area, Ralph E. Clark, manager of the Closed Car Section of the Car Service Division of the Association of American Railroads, told the Northwest Shippers Advisory Board at its meeting in Rapid City, S.D., on July 26. Mr. Clark added that although current floods sweeping the southwest grain belt, notably Kansas and Missouri, have upset scheduled movement of cars to the northwest area, railroads are working feverishly to overcome operating difficulties to build up the box car supply in the northwest as rapidly as possible.

As a result of advance plans, the

### CAR SURPLUSES, SHORTAGES

Average daily freight car surpluses and shortages for the week ended July 21 were announced by the Association of American Railroads on July 26 as follows:

	Surplus	Shortage
Plain Box	12,010	2,280
Auto Box	166	56
<b>Total Box</b>	<b>12,176</b>	<b>2,336</b>
Gondola	5	3,361
Hopper	0	1,707
Covered Hopper	0	89
Stock	1,319	77
Flat	7	723
Refrigerator	1,053	0
Other	276	33
<b>Total</b>	<b>14,836</b>	<b>8,326</b>

A.A.R. official continued, railroads serving the northwest grain belt now have 5,000 more system box cars available than at this time last year to help move the area's spring crop, which has been estimated at a record-breaking 386,000,000 bushels.

"Due to the aggressive freight car repair program launched following the outbreak in Korea last summer, the nation's railroads have shown a net gain of 40,000 serviceable cars, including 27,678 boxcars," Mr. Clark reported. "Thus far this year the railroads have had a net gain in freight car ownership of 18,000 after car retirements."

Emphasizing the preparedness of railroads to move this year's grain crop, Mr. Clark said railroads in the first half of 1951 loaded more cars of grain and grain products than in any similar period in history, except in 1947 when they loaded four per cent more due to abnormal movement of grain exports. Mr. Clark expressed belief that had sufficient grain been available in the first six months this year the railroads would have exceeded the 1947 record, as they had more than an ample number of cars in the grain-producing areas to complete such a movement.

### Amortization Certificates Go to Nine More Roads

Certificates of necessity authorizing accelerated amortization of facilities for tax purposes were awarded to nine railroads during the period of July 13-20, according to an announcement by the Defense Production Authority. The certificates were issued by D.P.A., upon recommendation by the Defense Transport Administration.

Railroads receiving certificates, together with amounts involved, are listed below. The percentage figure shows in each case the proportion that can be written off in five years.

Chicago, Indianapolis & Louisville, \$935,000, 80 per cent.

Detroit & Toledo Shore Line, \$681,000, 80 per cent.

(Continued on page 51)



CITY AND RAILROAD OFFICIALS admire a 42-foot bas-relief, the Romance of Transportation, recently unveiled in the Fort Street Union Depot at Detroit. Left to right are George H. Sido, vice-president of the Wabash; H. M. Phillips, freight traffic manager of the Pennsylvania; Thomas M. Hayes, passenger traffic manager of the Wabash; M. M. Cronk, vice-president and general manager of the Chesapeake & Ohio and president of the Fort Street Union Depot

Company; Edgar Preston Richardson, director of the Detroit Institute of Arts; Marshall Fredericks, the sculptor, and Mayor Cobo of Detroit. Mr. Cronk was in charge of the dedication, which climaxed the station's \$1,500,000 rehabilitation program begun in 1948. (*Railway Age*, August 28, 1948, page 34.) The bas-relief, cast in polished aluminum by the Gorham Company, of Providence, R. I., is in the main concourse of the station.



Preliminary Performance Data\*

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FAIRBANKS-MORSE

1600 hp. Road Transfer Locomotives

owned by the

Southern Railway System

---

\*Figures must be kept confidential, of course.  
But they show that these Fairbanks-Morse Locomotives  
are setting new standards on the Southern—for time in use,  
tonnages handled, and miles per day—in local  
service on the Western Lines.

...for operation photos—see inside!

**SOUTHERN RAILWAY SYSTEM**  
**MONTHLY STATEMENT OF LOCOMOTIVE MILES**

*Western* Division, Month of *June* 19 51

CORRECT

SUPERINTENDENT

Loco-motive Numbers	Total Locomotive Miles	Loco-motive Numbers	Total Locomotive Miles	Loco-motive Numbers	Total Locomotive Miles	Loco-motive Numbers	Total Locomotive Miles
6545							
6546							
6547							
6548							
6549							
6550							



On daily freight run No. 6547 stops at Buechel to drop a car ...



... then hits the road at a fast clip for local stops east of Louisville. Nighttime finds six of these 1600 hp. Fairbanks-Morse locomotives kept busy moving local and through freight on a turn-around basis.

**SOUTHERN RAILWAY SYSTEM**  
**MONTHLY STATEMENT OF LOCOMOTIVE MILES**

*Western* Division, Month of *July* 19 57

CORRECT

SUPERINTENDENT

Loco-motive Numbers	Total Loco- M	Loco-	Total Locomotive	Loco- motive Numbers	Total Locomotive Miles	Loco- motive Numbers	Total Locomotive Miles
6545							
6546							
6547							
6548							
6549							
6550							

Across the river on the hilly North Shore No. 6546  
is handling local switching and transfer operations...

... While No. 6548 heads for home down the hill from Milltown  
tunnel. Often, three of these units combine to haul 3600 tons  
up steep Duncan Hill. As two-unit 3200 hp. locomotives they  
pull 2400 tons. "Operating perfectly," say the local Southern  
mechanical and operating personnel.

# Fairbanks, Morse & Co.

600 SOUTH MICHIGAN AVENUE  
CHICAGO 5

The Southern's first diesel locomotive was delivered in August, 1939.

It was powered by the then "new" Opposed-Piston engine.

Testifying to the basic "rightness" of the Opposed-Piston design is the fact that these original Opposed-Piston powered locomotives are still in service.

Constantly improved through the years, Opposed-Piston engines totaling over 5,000,000 hp. have been built by Fairbanks-Morse.

Opposed-Piston diesel-powered Fairbanks-Morse locomotives are identified with many "firsts" in railroading performance.

As they are contributing here to the Southern Railway's efficient operation, so might they to yours.

FAIRBANKS, MORSE & CO., Chicago 5, Illinois



On-line display of the Southern Railway System's first diesel locomotive -- powered by an Opposed-Piston engine. August, 1939.

*FAIRBANKS-MORSE, a name worth remembering*

(Continued from page 46)

Detroit, Toledo & Ironton, \$3,336,798, 80 per cent; and \$745,000 65 per cent. Great Northern, \$5,900,000, 80 per cent. Illinois Central, \$10,152,500, 80 per cent. Missouri Pacific, \$24,655,591, 65 per cent. St. Johnsbury & Lamoille County, \$78,065, 65 per cent. Union of Pittsburgh, \$3,410,000, 80 per cent. Youngstown & Northern, \$1,240,000, 80 per cent.

## G.T.W. Buys Detroit's Transportation Building

The Grand Trunk Western has purchased the 10-story Transportation building in downtown Detroit, and will make it the general headquarters for the entire G. T. W. system. Heretofore, the road had been leasing office space in Detroit. Vice-President and General Manager C. A. Skog, who made the announcement, did not reveal the purchase price.

## ORGANIZATIONS

The Northern Indiana Chapter of the Railway & Locomotive Historical Society will sponsor a tour of the Monon from Chicago to Frankfort, Ind., on August 12, leaving Dearborn Station at 8:15 a.m. (C.S.T.) and returning about 6 p.m. At Frankfort the group will have an opportunity to photograph steam locomotives of the Nickel Plate. Tickets (which include lunch) may be obtained through Alex Darragh, 1815 Bergen street, South Bend 28, Ind. There will be a surcharge for tickets purchased at train-side.

The next regular meeting of the Allegheny Regional Advisory Board will be held on September 13 at the Roosevelt Hotel, Pittsburgh.

The Sixth National Instrument Conference and Exhibit, sponsored by the Instrument Society of America, will take place in the Sam Houston Coliseum, Houston, Tex., September 10-14.

The Atlantic States Shippers Advisory Board will hold its 85th regular meeting at the Hotel Robert Treat, Newark, N. J., September 19 and 20, at 9 a.m.

The American Association of Traveling Passenger Agents will hold its 69th annual meeting on September 14-15, at the Olympia Hotel, Seattle, Wash.

The annual convention of the National Model Railroad Association will be held at the Hotel New Yorker, in New York, September 1-3.

The Pennsylvania Railroad Garden Club will stage its 50th annual Dahlia and Fall Flower Show in the South Arcade of the Pennsylvania's 30th Street Station in Philadelphia. For show schedule or additional information address E. A. Smith, P.R.R. Garden Club, Room 1315, 15 North 32nd street, Philadelphia 4.

The Women's Traffic Club of Metropolitan St. Louis has elected the following officers for the 1951-52 club year: President, Hazel Diener; first vice-president, Ann O'Brien; second vice-president, Marie Kamuf; recording secretary, Florence Hennelly; financial secretary, Jo Coleman; corresponding secretary, Cleo Campbell, and treasurer, Georgia Best.

The National Planning Association has appointed Edward S. French, president of the Boston & Maine, as vice-chairman of the Panel on Transportation and Communication of the Committee of New England.

The Traffic Club of Brooklyn will hold its annual outing on August 1, at Reinhard's Park, Bayville, L. I., N. Y.

The National Railway Historical Society will hold its annual convention sponsored by the Midwest Chapter, at Queens Hotel, Montreal, on September 1, 2 and 3.

## SUPPLY TRADE

W. H. Russell, vice-president of Spring Packing Corporation, at Chicago, has been appointed vice-president in charge of railroad sales. Born in Clinton, Ill., July 7, 1912, Mr. Rus-



W. H. Russell

sell was graduated from the University of Illinois in 1934, and subsequently served in the traffic department of the Illinois Central until 1936, when he became a sales representative for

the American Locomotive Company at Cleveland. Appointed acting district sales manager in 1942, two years later he became Southwestern district manager for the Baldwin Locomotive Works at St. Louis, and in 1948 joined the Spring Packing Corporation as vice-president.

Leonard J. Fletcher, formerly director of training and community relations of the Caterpillar Tractor Company, Peoria, Ill., has been elected a vice-president. Ralph J. Morgan, assistant to the president, has been appointed executive assistant. Mr



Leonard J. Fletcher

Fletcher joined Caterpillar in January 1927 as director of agricultural sales. He was appointed assistant general sales manager in 1937 and director of training in 1941. Seven years ago his duties were increased to include direction of the company's community relations division.

Albert R. Pfeltz, Jr., assistant to the sales manager, New York district, United States Steel Company, has been appointed assistant sales manager in the Cincinnati district sales office.

The Chicago Steel Service Company is now located in new quarters at Kildare avenue and 45th street, Chicago 32. The firm's telephone number remains unchanged.

Newhall - Marshall - Wood, Inc., will change its company name, effective August 1, to the Marshall Railway Equipment Corporation. General offices will remain at 50 Church street, New York 7.

The Sunroc Company has appointed two new distributors for its electric water cooling and purifying equipment—the Johnson Electrical Supply Company, Cincinnati, in the Cincinnati area, and the Crane Company, Pittsburgh, in the Pittsburgh area.

The Electric Storage Battery Company has moved its general offices from its plant at 19th street

and Allegheny avenue to 15th and Chestnut streets, Philadelphia. Offices concerned with engineering and manufacturing operations will be moved from 19th street and Allegheny avenue to the company's other Philadelphia plant, at Rising Sun and Adams avenues, when a \$5,000,000 building program is completed there.

**H. L. Henry**, formerly western New York state representative for the **Watson-Stillman Company**, Roselle, N. J., has been appointed divisional sales representative for northern Ohio, with headquarters in Akron, Ohio. The **Don W. Patterson Company**, 2016 Rand building, Buffalo, N. Y., has been appointed exclusive sales representative in western New York.

**A. H. Borchardt** has been elected a vice-president of the **Worthington Pump & Machinery Corp.**, with overall responsibility for sale of the corporation's entire line of pumping equipment, including centrifugal, reciprocating and vertical turbine pumps. Mr. Borchardt was graduated from Columbia University with a mechanical engineering degree, after which he joined Worthington's erecting and test-

and the **E. F. Conger Company**. **W. P. Conyers, Jr.**, formerly vice-president and treasurer of the Taylor-Colquitt Company, will be president and treasurer of Piedmont Wood Preserving, and **E. F. Conger** will be chairman of the board.

**A. R. Booker** has been appointed executive vice-president and general manager of **Electrofilm Corporation**, to succeed **W. G. Andrews**, who has resigned.

**P. A. Wedding**, professor of civil engineering at the University of Maryland, has joined the laboratory staff of the **Timber Engineering Company** in a consulting capacity. Prof. Wedding will be engaged in designing various types of railroad ties, which is part of the railway tie project being conducted for the National Lumber Manufacturers Association and the A.A.R.

## EQUIPMENT AND SUPPLIES

### June Locomotive Installations

New locomotives placed in service by Class I railroads in June included 251 diesel-electrics, 2 steam and 1 electric, bringing the six-months' total to 1,309, according to an announcement by the Association of American Railroads. This total for the first half of 1951 included 1,299 diesel-electrics, 8 steam and 2 electric locomotives.

By comparison, Class I roads installed 1,127 new locomotives in the first six months of 1950, including 1,122 diesel-electric and 5 steam locomotives.

As of July 1 this year there were 1,674 new locomotives on order, consisting of 2,251 power units. Diesel-electric locomotives totaled 1,658, consisting of 2,223 power units. In addition, there were 14 steam locomotives and 2 electric, the latter consisting of 4 units.

New locomotives on order on July 1 last year totaled 1,000, of which 973 were diesel-electric, 23 steam and 4 electric.

### FREIGHT CARS

The **Canadian National** has ordered 4,305 freight-train cars costing an estimated \$34,400,000. The orders were placed as follows: Canadian Car & Foundry Co.—1,500 50-ton box cars; Eastern Car Company—260 50-ton box, 750 70-ton gondola, 30 50-ton dump, 5 70-ton triple hopper and 10 30-ton stock cars; National Steel Car Corporation—500 50-ton flat, 750 70-ton triple hopper and 500 50-ton refrigerator cars.

ing department. After working successively as draftsman, field engineer and sales engineer, he was appointed assistant manager of the centrifugal pump sales department in 1921 and manager in 1929. Subsequently, he was appointed, successively, sales manager of the Harrison, N. J., plant, manager of the commercial engineering department and, in 1934, assistant vice-president and manager of centrifugal pump application and sales division.

**Harold A. Miller**, formerly sales personnel manager for the **United States Steel Supply Company**, has been appointed general staff manager, general sales department.

The **Piedmont Wood Preserving Company** has acquired the assets and business of the **Piedmont Company**

The **Wabash** has ordered 50 70-ton 65½-ft. gondola and 100 70-ton covered hopper cars costing \$1,078,000. The gondolas, to be built by the Greenville Steel Car Company, will be equipped with steel floors and drop ends. Delivery is expected in the second quarter of 1952. The covered hoppers will be built by the Pullman-Standard Car Manufacturing Company.

### LOCOMOTIVES

The **Canadian National** has ordered four diesel-electric locomotive units costing \$731,000. Three 1,200-hp. road units, for use on the Newfoundland district, will be built by General Motors Diesel, Ltd., and one 1,000-hp. switching unit, for use on the **Central Vermont**, will be constructed by the American Locomotive-General Electric Companies.

The **Erie** has ordered 15 diesel-electric locomotive units costing an estimated \$1,996,000. The Electro-Motive Division of General Motors Corporation will build one 1,500-hp. "B" freight, three 1,500-hp. road-switching and four 1,000-hp. switching units for delivery in February and March 1952; the Baldwin-Lima-Hamilton Corporation will construct four 1,600-hp. road-switching units for delivery next November; and the American Locomotive-General Electric Companies will build two 1,600-hp. road-switching (delivery in November) and one 1,000-hp. switching units (delivery scheduled for next March).

The **Ontario Northland** has ordered eight 1,600-hp. diesel-electric road-switching locomotive units from the Montreal Locomotive Works at an approximate cost of \$1,600,000. Delivery is expected early in September.

The **Utah** has ordered three 1,600-hp. diesel-electric road-switching locomotive units from the American Locomotive-General Electric Companies at an estimated cost of \$630,000. Delivery is scheduled for next December.

### SIGNALING

The **Lehigh Valley** has ordered from the General Railway Signal Company equipment to install a type H, class M system at Richards West, Easton, Pa. The present control machine at Easton will be expanded by addition of a 10-inch panel equipped with 14 track lights and eight levers for control of seven switch machines and eight signals. Included in this order are model 5D switch machines and type SA searchlight signals.

The **Richmond, Fredericksburg & Potomac** has ordered from the Union Switch & Signal Division of Westinghouse Air Brake Company material to consolidate interlockings AY, NA and GN at Richmond, Va. In addition to the style C control machine,



A. H. Borchardt



*They cost less...last longer*

**KOPPERS CREOSOTED  
TIMBER PANEL  
GRADE CROSSINGS**

• Koppers Creosoted Grade Crossings are made to last. They are sturdily built and decay-resistant, do not sag, spall, "washboard," or disintegrate under heavy wheel load. When the track is worked, they can be removed and replaced, using all the original material.

The panel method of construction offers easy installation. Completely assembled individual panels can be handled and placed by workmen. The assembly is securely fastened to withstand vibration, swelling or shrinking of the wood.

Write for a copy of the new folder on KOPPERS GRADE CROSSINGS. It contains construction details, technical data, and the reasons why Koppers Grade Crossings will save you money.



**PRESSURE-TREATED WOOD**

KOPPERS COMPANY, INC. • Pittsburgh 19, Pa.

which will be installed at AY Tower, the order includes style A-5 electro-pneumatic switch machines, relays, rectifiers, transformers, switch circuit controllers and housings. Field installation will be handled by railroad forces.

## CAR SERVICE

I.C.C. Service Order No. 865, which imposes super-demurrage charges running up to \$20 per day has been modified by Amendment No. 12, which extends for another month (until September 1) the exemption provision applicable to refrigerator cars.

I.C.C. Service order No. 873 has been modified by Amendment No. 1, which sets back the expiration date from July 31 to January 15, 1952. The order makes Richard H. Lambertson the commission agent with authority to control the movement of tank cars.

## CONSTRUCTION

**Atchison, Topeka & Santa Fe.**—A contract covering the furnishing and installation of a dust collection system in elevator "A" at Argentine (Kansas City), Kan., yard has been awarded to the Day Company of Minneapolis.

**Illinois Central.**—A petition has been filed with the Illinois Commerce Commission for permission to sell to the Prudential Insurance Company of America the "air rights" site over trackage at Randolph street near Michigan avenue, Chicago, for the recently announced 35-story building Prudential plans to build on the site. (*Railway Age*, March 12, page 92.) A hearing on the petition has been set for July 26. The price for the air rights and the numerous small parcels of land which the building's foundation piers will occupy has been reported as \$2.27 million. The insurance company is to assume the expense of shifting facilities of the I.C.'s Randolph Street suburban terminal without disturbing the service. This is expected to cost well over \$500,000. Under the plan, present wooden train platforms will be replaced with permanent concrete walks. Actual construction on the insurance company's building will hinge on the speed at which detailed plans can be completed and on world and local conditions. From two and one-half to three years will probably be required once the project gets under way.

**New York Central.**—Expansion of track facilities at DeWitt yard, East Syracuse, N. Y., has been undertaken

by this road to make possible faster dispatching of eastbound freight trains. The road also will erect two additional storage tanks for fuel oil at the DeWitt Yard service station for diesel-electric locomotives. Both projects are expected to be completed this year.

Four tracks in the eastbound classification and advance yards will be connected to accommodate longer trains and nine tracks on the north side of the yard will be lengthened. Besides speeding dispatching of trains, the greater capacity of the yard thus achieved will reduce blocking of the Main Street public crossing by elimination of switching movements. A modern building to contain the office of the yardmaster and a locker-rest room with comfort facilities for train inspection forces will be built at the eastern end of the yard to replace two older structures.

Erection of the two new fuel oil storage tanks looks forward to increased dieselization of the Central's freight service east of DeWitt yard, which will become the central location for servicing and fueling all main line freight power east of Buffalo. The new tanks, each of one million gallons capacity, will make a total of six similar tanks at this location.

## FINANCIAL

**Canadian National.—Acquisition of Q.R.L.&P.**—The Canadian Parliament has authorized the C.N. to purchase the electrified railway line operated by the Quebec Railway, Light & Power Co. from Quebec City east to St. Joachim, Que., approximately 25 miles, and to confirm an earlier purchase of a small segment of Q.R.L. & P. line. The reported total purchase price of the mileage to be acquired is \$750,000, plus an additional \$75,000 for the earlier purchase. The acquisition will provide a direct connecting link for the C.N. between Quebec City and its Murray Bay subdivision, which extends to Nairn's Falls, Que., about 92 miles east of Quebec City.

In 1949, the last year for which complete figures are available, the Q.R.L. & P. produced 21,015,796 revenue passenger-miles and 9,342,755 revenue ton-miles. Its gross revenue was \$966,168, its operating expenses were \$882,893, and its net railway operating income, after taxes and rentals, was \$29,961. It owns seven locomotives, of which six are electric, 89 freight cars and 39 passenger cars, including nine motor units. Its acquisition has been estimated to improve the C.N.'s annual income position by about \$50,000, after "certain allowances," principally for new equipment and track improvements.

**Chicago Great Western.—Track-**

**age Rights.**—This road has asked the I.C.C. to approve renewal of an existing agreement with the Chicago, Burlington & Quincy, covering use by the C.G.W. of a 0.9-mile C.B.&Q. segment between Galena Junction, Ill., and Portage Curve. The agreement, which dates from 1888, would be renewed for 10 years from January 1, 1951. In addition to a fixed rental, the C.G.W. would pay a proportion of the taxes and of the expense of maintaining and operating the segment.

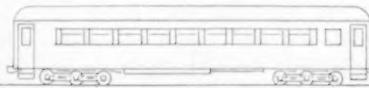
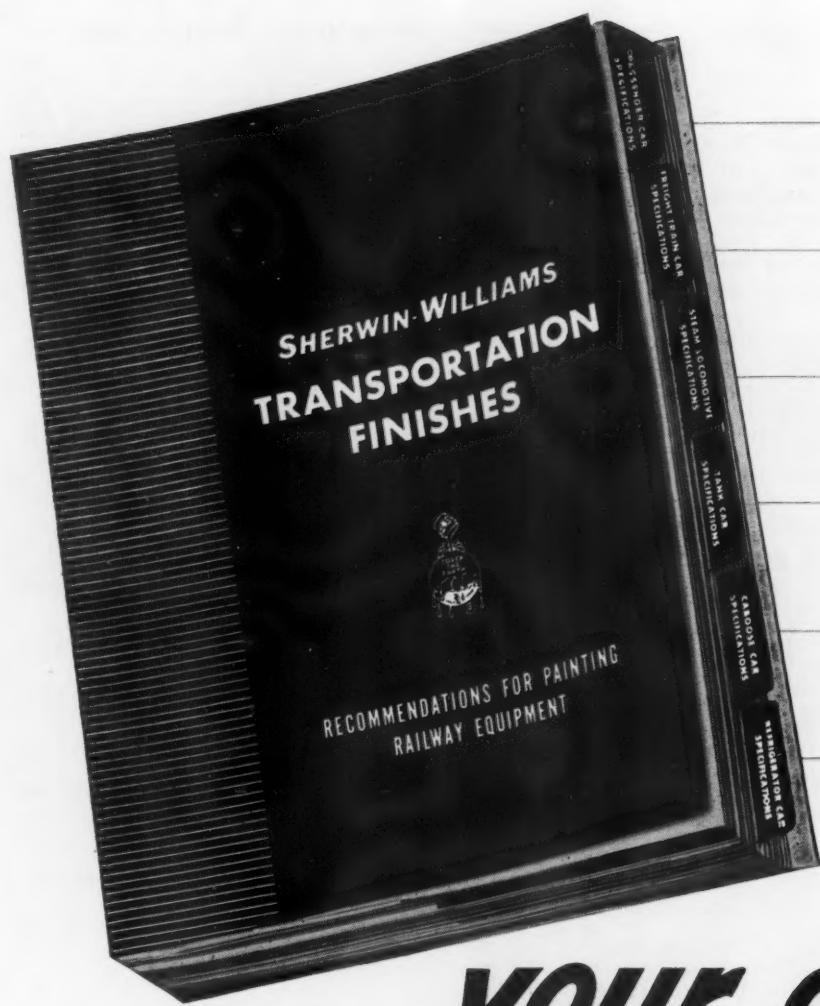
**Consolidated of Cuba.—Recapitalization.**—A special meeting of stockholders of this company, called for July 18, has been adjourned to August 1, according to Wilfred J. Brown, chairman. At the July 18 meeting, it was reported, management did not receive enough proxies favoring recapitalization of various railroads in the group to implement a proposed stock exchange plan involved in the recapitalization and debt adjustment program.

**Pennsylvania.—Leases Air Rights.**—This road has leased for 50 years to the Terminal Corporation of New Jersey and to Railroad Properties, Inc., air rights to plots of 106,128 and 19,228 sq. ft., respectively, in Journal square, Jersey City, N. J., for development. The larger plot adjoins Journal Square Station, owned by the Pennsylvania and operated by the Hudson & Manhattan. The smaller plot is connected with the station by an underground passage.

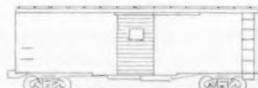
**Seatrain.—Acquisition of Ocean Steamship Company.**—Division 4 of the I.C.C. has denied the company's petition for temporary approval of its application to purchase the Ocean Steamship Company. Seatrain sought permission to open up the coastwise service between Savannah, Ga., and New York and Boston for 180 days. It also asked the commission to allow such temporary service to continue until a final decision is reached on the pending application.

In denying such temporary authority, Division 4 noted that Seatrain's pending application "is seeking to purchase nothing but the bare certificate" of Ocean Steamship, and that the latter company has not performed any service under the certificate "for many years." No existing service will be disrupted while the application is pending, the division said. The division then went on to say that "numerous parties" have intervened in opposition to the Seatrain application, and even temporary authority should not be granted without full hearing. It concluded that "good cause has not been shown" for the grant of temporary operating authority.

Four days after the above order was issued, Seatrain filed a new petition with the commission, asking for reconsideration by the full commission of Division 4's denial. In this petition, Seatrain said the only opposition is



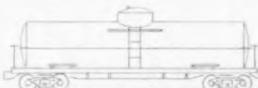
PASSENGER CAR SPECIFICATIONS



FREIGHT TRAIN CAR SPECIFICATIONS



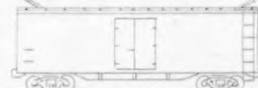
STEAM LOCOMOTIVE SPECIFICATIONS



TANK CAR SPECIFICATIONS

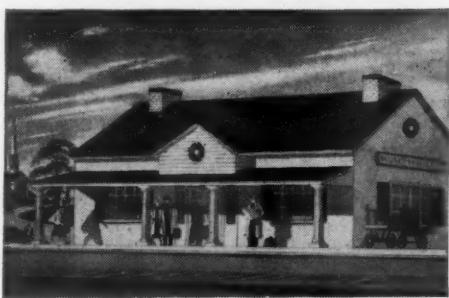


CABOOSE CAR SPECIFICATIONS



REFRIGERATOR CAR SPECIFICATIONS

## to better engineered FINISHES for rolling stock



WEATHERATED FINISHES FOR STATION MAINTENANCE

Sherwin-Williams Railway Station Paints are specifically designed, too, to meet the requirements of railway service, both in color styling and in durability. Ask for booklet E739.

Good engineering practice pays—in finishes and finishing methods as well as in the costly equipment they protect!

This 190-page book summarizes recommended methods and materials for maintenance of all types of railway rolling stock, out of Sherwin-Williams broad background of experience in supplying railway finishes for over 75 years.

You'll find latest Sherwin-Williams advances in paint technology included with complete specifications for specialized railway application. The book is available to railway executive or supervisory personnel without cost, through Sherwin-Williams Transportation Division representatives or by writing The Sherwin-Williams Co., Transportation Division, Cleveland 1, Ohio.

**SHERWIN-WILLIAMS  
RAILWAY FINISHES**



from railroad competitors, and declared that it can render service to shippers "at far less cost" than shippers obtain under existing rail rates.

**Southern Pacific.—Lease.**—Division 4 of the I.C.C. has authorized this company to continue to lease and operate the lines of its wholly owned subsidiary, the Southern Pacific Railroad Company. The prior lease expired June 30, 1951, and the new lease will extend from July 1, 1951, through December 31, 2000. Division 4 noted that the new agreement "merely extends the existing arrangements" between the S.P. and its subsidiary. The sub-

sidiary company owns approximately 1,990 miles of main line and 1,270 miles of branch line.

**Western Maryland.—Preferred Dividend.**—This road has declared a dividend of \$7 a share on its 7 per cent cumulative first preferred stock, payable August 30, for the year ended June 30, 1952. On June 30, 1951, arrears on the issue amounted to approximately \$140 a share. The Baltimore & Ohio owns 167,127 shares of the issue, or 94.2 per cent of the outstanding 177,420 shares, and will receive \$1,169,889 when the dividend is paid.

## Investment Publications

[The surveys listed herein are, for the most part, prepared by financial houses for the information of their customers. Knowing that many such surveys contain valuable information, *Railway Age* lists them as a service to its readers, but assumes no responsibility for facts or opinions which they may contain bearing upon the attractiveness of specific securities.]

**Baker, Weeks & Harden**, One Wall st., New York 5.

*New York, Lackawanna & Western, 1st 4s, 1973. 1st 4½s, 1973, 1st 5s, 1973.* June 18.

**Fahnestock & Co.**, 65 Broadway, New York 6.

*Attractive Rail Stocks.* July 23.

**H. Hentz & Co.**, 60 Beaver st., New York 4.

*What Next for the Rails?* Fortnightly Review, July 23.

**Jas. H. Olyphant & Co.**, 61 Broadway, New York 6.

*Olyphant's Economic Chronology, 1945-1951, The Post-War Years.*

**R. W. Pressprich & Co.**, 48 Wall st., New York 5.

*Railroad Income Bonds.* June 1951.

**Smith, Barney & Co.**, 14 Wall st., New York 5.

*Railroad Bond Exchange.* Railroad Bulletin No. 62, July 18.

*Railroad Earnings.* July 18.

**J. R. Williston & Co.**, 115 Broadway, New York 6.

*Current Position of Railroad Securities.* July 6.

## Security Price Averages

July Previous Last  
24 week year

Average price of 20 representative railway stocks	52.72	51.00	46.37
Average price of 20 representative railway bonds	91.85	91.59	93.21

## Dividends Declared

Atlanta & Charlotte Air Line.—\$4.50, semi-annual, payable September 1 to holders of record August 20.

Atlantic Coast Line.—\$1.25, payable September 12 to holders of record August 15.

Bangor & Aroostook.—5% preferred, \$1.25 quarterly, payable October 1 to holders of record September 6.

Louisville & Nashville.—\$1, quarterly, payable September 12 to holders of record August 1.

Michigan Central.—\$25, semiannual, payable July 31 to holders of record July 13.

Mine Hill & Schuylkill Haven.—\$1, semiannual, payable August 1 to holders of record July 16.

New York, Chicago & St. Louis.—6% preferred A, \$1.50, quarterly, payable October 1 to holders of record September 7.

Western Maryland.—7% cumulative 1st preferred, \$7, on arrears, for year ended June 30, 1952, payable August 30.

## New Securities

Applications have been filed with the I.C.C. by:

**BALTIMORE & OHIO.**—To assume liability for \$7,755,000 of series CC equipment trust certificates to finance in part 2,000 hopper cars, costing an estimated \$9,700,000. The American Car & Foundry Co. and the Bethlehem Steel Company each will build 1,000 of the new cars. The estimated cost per car is placed at \$4,850. The certificates would be dated September 1, and would mature in 15 annual installments of \$517,000 each, beginning September 1, 1952. They would be sold on the basis of competitive bidding, with interest rate to be set by winning bidder.

**SOUTH GEORGIA.**—To issue and sell \$300,000 of first mortgage, 5 per cent bonds. The bonds would be sold at par to Brooks-Scanlon, Inc.,

## Selected Income and Balance-Sheet Items of Class I Steam Railways in the United States

Compiled from 127 reports (Form IBS) representing 131 steam railways

(Switching and Terminal Companies Not Included)

Income Items	United States			
	For the month of April 1951	1950	1951	1950
1. Net railway operating income.....	\$70,594,571	\$62,160,875	\$245,567,069	\$186,038,343
2. Other income.....	16,911,739	18,461,126	73,909,662	73,265,544
3. Total income.....	87,506,310	80,622,001	319,476,731	259,303,887
4. Miscellaneous deductions from income.....	4,413,151	3,881,452	21,804,309	14,819,772
5. Income available for fixed charges.....	83,093,159	76,740,549	297,672,422	244,484,115
6. Fixed charges:				
6-01. Rent for leased roads and equipment.....	10,256,802	9,486,762	38,041,347	36,384,625
6-02. Interest deductions <sup>1</sup> .....	24,821,349	24,980,242	99,176,146	99,838,209
6-03. Amortization of discount on funded debt.....	244,375	224,729	911,753	833,944
6-04. Total fixed charges.....	35,322,526	34,691,733	138,129,246	137,056,778
7. Income after fixed charges.....	47,770,633	42,048,816	159,543,176	107,427,337
8. Other deductions.....	3,085,679	3,127,369	12,204,433	12,835,307
9. Net income.....	44,684,954	38,921,447	147,338,743	94,592,030
10. Depreciation (Way and structures and Equipment).....	36,963,597	35,033,571	146,143,449	139,586,859
11. Amortization of defense projects.....	3,661,613	1,366,965	11,628,190	5,496,075
12. Federal income taxes.....	39,824,763	26,676,139	166,123,876	84,581,107
13. Dividend appropriations:				
13-01. On common stock.....	6,021,951	4,639,339	60,990,778	42,722,230
13-02. On preferred stock.....	573,927	529,162	45,246,066	23,829,736
Ratio of income to fixed charges (Item 5 + 6-04).....	2.35	2.21	2.16	1.78

### Selected Expenditures and Asset Items

Expenditures (gross) for additions and betterments—Road	United States	
	Balance at end of April 1951	1950
17. Expenditures (gross) for additions and betterments—Equipment	\$ 91,481,362	\$ 74,070,137
18. Investments in stocks, bonds, etc., other than those of affiliated companies (Total, Account 707).....	305,650,316	216,304,585
20. Other unadjusted debits.....	477,160,182	472,782,751
21. Cash.....	113,120,903	110,707,558
22. Temporary cash investments.....	820,834,703	839,531,869
23. Special deposits.....	927,904,105	808,460,559
24. Loans and bills receivable.....	141,789,603	117,258,060
25. Traffic and car-service balances—Dr.....	1,736,479	1,094,766
26. Net balance receivable from agents and conductors.....	58,342,744	51,211,506
27. Miscellaneous accounts receivable.....	161,871,667	126,887,507
28. Materials and supplies.....	470,365,980	267,302,916
29. Interest and dividends receivable.....	840,155,821	716,742,785
30. Accrued accounts receivable.....	17,012,276	16,080,590
31. Other current assets.....	227,775,914	170,960,798
32. Total current assets (items 21 to 31).....	3,703,195,919	3,147,060,640

### Selected Liability Items

Funded debt maturing within 6 months <sup>2</sup>	United States	
	\$152,862,174	\$126,054,338
41. Loans and bills payable <sup>3</sup>	3,540,000	8,804,845
42. Traffic and car-service balances—Cr.....	97,513,318	87,326,249
43. Audited accounts and wages payable.....	569,004,605	473,108,025
44. Miscellaneous accounts payable.....	247,660,252	213,290,783
45. Interest matured unpaid.....	47,535,176	44,917,370
46. Dividends matured unpaid.....	7,926,089	4,729,056
47. Unmatured interest accrued.....	66,069,494	66,220,452
48. Unmatured dividends declared.....	27,243,656	20,117,071
49. Accrued accounts payable.....	227,473,740	172,862,980
50. Taxes accrued.....	898,500,119	603,258,093
51. Other current liabilities.....	86,404,785	77,004,765
52. Total current liabilities (items 41 to 51).....	2,278,871,234	1,771,639,689

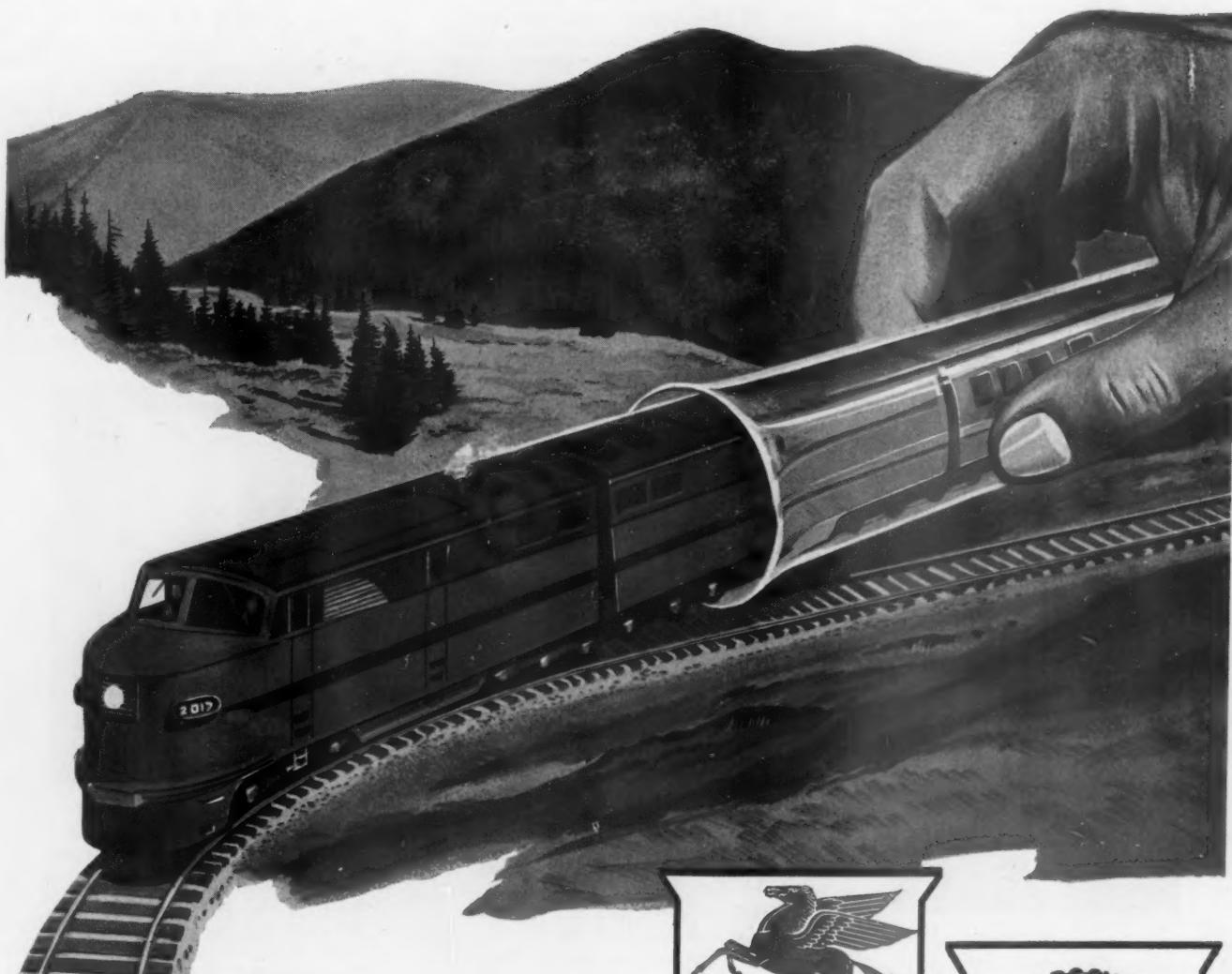
<sup>1</sup> Represents accruals, including the amount in default.

<sup>2</sup> Includes payments of principal of long-term debt (other than long-term debt in default) which becomes due within six months after close of month of report.

<sup>3</sup> Includes obligations which mature not more than one year after date of issue.  
Compiled by the Bureau of Transport Economics and Statistics, Interstate Commerce Commission.  
Subject to revision.

## "TEST TUBE" TESTING ISN'T ENOUGH!

That's why Socony-Vacuum conducts  
continuous Field Evaluations in cooperation  
with Diesel Operators and Builders



There is no single cure-all for the many problems of railroad Diesel operation. But through the cooperation of operator, builder and oil supplier, answers *are* being found.

We have long been part of this cooperative research effort. Today, for example, we are employing special laboratory facilities solely on the problem of *additives*. But we know that test tube testing is *not* enough.

That's why—whatever the problem—our men conduct exhaustive laboratory and *field* evaluations. Their findings are then correlated with those of operators and builders everywhere. The result is Diesel lubricating oils which are *proved in performance*—before you ever get them!

Why not use our products, research facilities and experience to improve *your* operations?

SOCONY-VACUUM OIL CO., INC., RAILROAD DIV. 26 Broadway, New York 4, N.Y.



# SOCONY-VACUUM

*Correct Lubrication*

WORLD'S GREATEST LUBRICATION KNOWLEDGE  
AND ENGINEERING SERVICE

and Waldo De Loache and an associate, whom the application identified as holders of "substantial" amounts of the applicant's stock. Proceeds would pay \$100,000 of indebtedness to those same stockholders, and raise \$200,000 for repairs and improvements to the applicant's line.

Division 4 of the I.C.C. has authorized:

BIRMINGHAM SOUTHERN.—To issue a \$2,500,000 promissory note, to the United States Steel Corporation, its parent company. Proceeds of the note will finance in part acquisition of one diesel-electric locomotive, 235 gondolas, 100 hopper and 100 box cars. Total cost of the equipment is estimated at \$2,848,466. The note will mature in 20 semiannual installments of \$125,000 each, and will bear interest at 3 per cent.

## RAILWAY OFFICERS

### EXECUTIVE

Samuel W. Fordyce, recently appointed executive assistant on the president's staff of the WESTERN PACIFIC at San Francisco (*Railway Age*, June 18), is a 1922 graduate of Harvard University's Engineering School, and has had a career in banking, civil engineering and railroading. From 1923 to 1945 he was associated with the Couch interests, which controlled



Samuel W. Fordyce

a number of utility companies and railroads in the Southwest. During the period 1936 to 1945 he was in the service of the Kansas City Southern, acting as assistant to the president of that road from 1939. Mr. Fordyce came to the W.P. from a Los Angeles firm of management engineers and financial consultants.

### FINANCIAL, LEGAL & ACCOUNTING

As announced in the July 9 *Railway Age*, Charles E. Mekota, general claim agent of the CHICAGO, ROCK ISLAND & PACIFIC, has retired, and has been succeeded by John J. Clifford. Mr. Mekota is a native of Solon, Iowa, attended school in Cedar Rapids, and obtained his first position with the Rock Island at Des Moines as a clerk in the claims department 40

years ago. He became general claim agent in 1933.

Mr. Clifford is a native of Chicago and has served with the Rock Island since 1919. Before his recent appointment he was chief clerk.

In connection with the leasing by the CAROLINA & NORTHWESTERN of the BLUE RIDGE, the DANVILLE & WESTERN, the HIGH POINT, RANDELMAN, ASHEBORO & SOUTHERN and the YADKIN, all bills, reports and summaries of interline freight, per diem, freight claims and all other accounts covering business subsequent to June 30, should be rendered in the name of the Carolina & Northwestern, and not separately in the names of the individual companies, as was erroneously reported in *Railway Age* July 16, page 70. Accounts covering business prior to midnight June 30 should be rendered separately in the names of the individual companies, but mailed to officers of the C.N. as listed in *Railway Age* July 16.

Edward W. Borne has been appointed counsel and Leo V. Sullivan executive secretary of the LONG ISLAND TRANSIT AUTHORITY (*Railway Age*, July 16, page 35). Mr. Borne, who is a member of the firm of Alexander & Green, has specialized in railroad reorganizations for many years. Mr. Sullivan was formerly comptroller of the New Haven and was accounting consultant for the Long Island Railroad Commission appointed by Governor Dewey last November. Recently Mr. Sullivan has been acting as consultant to the trustee of the Long Island.

A. C. Rhodes, general auditor of the Pere Marquette district of the CHESAPEAKE & OHIO, has retired. A. L. Engwall, auditor, has been given full administrative authority over all accounting department personnel and will function on the P.M. district in place of Mr. Rhodes. He will be headquartered at Detroit. Mr. Rhodes was born at Bryan, Tex., June 26, 1886, began railroad service in 1905 as ticket clerk on the San Antonio & Arkansas Pass (now Texas & New Orleans) at Houston, and went with the Pere Marquette in 1912 as a clerk at Detroit. After holding other assignments, in 1929 he became auditor, being appointed assistant comptroller later the same year and promoted to general auditor of the Pere Marquette in 1931. Mr. Rhodes was made general auditor, P.M. district, of the C.&O. in June 1947.

R. Druschke, auditor of disbursements of the SOUTHERN PACIFIC LINES IN TEXAS & LOUISIANA, has retired after 45 years' service. He is succeeded by R. F. Davis. E. A. Field has been appointed acting assistant auditor of disbursements. Mr. Druschke was born in Breslau, Germany, June 29, 1881. He entered railroad service in June 1905 as a junior clerk with the

Galveston, Harrisburg & San Antonio (now Texas & New Orleans) at Houston. In 1919 he became auditor of disbursements on the International-Great Northern, returning to the G.H.&S.A. as special accountant the following year. In 1927 he became assistant auditor on Morgan's Louisiana & Texas (now T.&N.O.); in 1937, assistant auditor of disbursements T.&N.O.; and, subsequently, auditor of disbursements.

### OPERATING

A. B. Burpee, superintendent of transportation for the CANADIAN PACIFIC's Prairie and Pacific regions at Winnipeg, is retiring August 1. He will be succeeded by Henry Chester, assistant to general superintendent of transportation at Montreal (*Railway Age*, July 9). A native of New Brunswick, Mr. Burpee entered railroad service at McAdam, N. B., as roadmaster's clerk over 50 years ago, and subsequently moved up the operating ladder until his appointment as in-



Henry Chester

spector of transportation in 1938. He was promoted to superintendent of transportation in 1942.

Mr. Chester has been in the service of the C.P. since 1916. After three years as chief dispatcher at Nelson, B. C., he moved to Winnipeg in 1944 as inspector of transportation. Last March he was transferred to Montreal and appointed assistant to general superintendent of transportation.

W. C. Preston has been appointed assistant general superintendent transportation of the GREAT NORTHERN and H. W. Fish, assistant to general superintendent transportation, both with headquarters at St. Paul.

### TRAFFIC

Roy W. Tierney, newly appointed general freight agent of the ILLINOIS CENTRAL at Chicago (*Railway Age*, July 9), is a native of Spokane, Wash. His career with the I. C. began in 1920 when he became employed as an office boy in the vice-president's office at Chi- (Continued on page 61)

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## LITERATURE and PAMPHLETS Offered by Railway Age Advertisers

Following is a compilation of free literature and pamphlets offered by advertisers in the five July issues of RAILWAY AGE.

Circle the item number (or numbers) on the card below to receive the additional literature desired.

### 359. Steel

*Bethlehem Steel Company.* Information on Bethlehem's Mayari R low-alloy, high-strength steel in Catalog 259.

### 360. Railroad Telephones

*Automatic Electric Sales Corp.* Circular #1697 gives specific details on Automatic Electric railroad telephones.

### 361. Circuit Breakers

*Westinghouse Electric Corp.* Bulletin B-4081 gives full data on the Westinghouse circuit breakers.

### 362. Train Washer

*Whiting Corporation.* Bulletin CW-C-409 gives additional information on the Whiting Train Washer.

### 363. Steel Car Parts

*Edgewater Steel Company.* Enlarged copies of Hungerford cartoon without advertising copy, used in July 2 RA ad, available.

### 364. Signalman's Equipment

*Fairbanks, Morse & Company.* Descriptive literature available on any of the Fairbanks-Morse signalman's equipment. Specify.

### 365. Creosoted Grade Crossings

*Koppers Company.* New folder on Koppers grade crossings contains construction details, technical data; tells why they save money.

### 366. Journal Box Lids

*Symington-Gould Corporation.* Bulletin J-309 gives details on the Symington composite articulated journal box lids.

### 367. Fork Lift Truck

*Towmotor Corporation.* The brochure "Handling Materials Illustrated" is filled with facts on the Towmotor Mass Handling methods.

### 368. Rail Data Card

*Colorado Fuel and Iron Corp.* Handy pocket card provides necessary information on rail for engineers and trackmen.

### 369. Friction Draft Gear

*National Malleable and Steel Castings Co.* Report #950 on AAR 5 and 12 year tests (taken from the annual report of the AAR Committee on Couplers and Draft Gears).

### 370. Mobilift Tier-Master

*Mobilift Corporation.* New bulletins on Mobilift Lev-R-Matic Drive and Tier-Master Stand-Up Model "E".

### 371. One-Man Grain Doors

*Signode Steel Strapping Company.* Pamphlet 36 by Signode presents the Association of American Railroads' approval of these one-piece, one-man freight car grain doors.

### 372. Transportation Finishes

*Sherwin-Williams Co.* (Available only to railway executive or supervisory personnel). 190-page book summarizes recommended

methods and materials for maintenance of all types of railway rolling stock; includes latest S-W paint technology advances and complete specifications for specialized railway applications. Limited distribution; please request on letterhead.

### 373. Railroad Lanterns

*Justrite Manufacturing Co.* Free catalog illustrates and describes the Justrite line of lanterns.

### 374. Refrigerator Car Insulation

*American Hair & Felt Co.* Complete data on Streamlite Hairinsul all-hair refrigerator car insulation.

### 375. Transporting "Ribbonrail"

*Oxweld Railroad Service Co. div. of UC&CC.* Booklet on the many ways of transporting Ribbonrail available.

### 376. Evaporative Condenser

*Safety Car Heating & Lighting Co., Inc.* Drawing 850027 shows the mounting dimensions for the Safety Evaporative Condenser.

### 377. Pipe Insulation

*Johns-Manville.* Folder IN-132A describes J-M Thermo-Wrap lace-type insulation for steam train lines; folder IN-131A Thermo-Tape. Please specify.

### 378. Wheel Brake

*Union Asbestos & Rubber Co.* Literature available on type 3750-A, A.A.R. Certified Equipo Non-Spin Wheel Brake.

### 379. Met-L-Wood

*Met-L-Wood Corporation.* Full information on Met-L-Wood uses in new or rebuilt cars—for passenger interiors.

### 380. Trucks

*Standard Car Truck Co.* Booklet available illustrating the low installation cost of replacement parts—esp. shoes.

### 381. Chemical Type Wood Preservative

*The Dow Chemical Co.* Booklet, "Pointers on Penta", gives information on Penta (pentachlorophenol), the chemical wood preservative.

### 382. Air Conditioning Units

*Waukesha Motor Co.* Bulletin 1496 describes Waukesha propane-powered air conditioning and Enginator units; mobile, engine-driven Refrigeration and Generator equipment.

### 383. Railway Station Paints

*Sherwin-Williams Co.* Booklet E739 gives details on S-W weathered railway finishes for station maintenance.

### 384. Swinging Boom Cranes

*Silent Hoist & Crane Co.* Bulletin #79 illustrates the job possibilities of the Krane Kar swinging boom railroad crane.

(Continued first column reverse side)

## Additional Product Information

This is a complete list of products mentioned in the advertisements in this issue. For more data on any product shown, circle the page number on the reply cards below, fill in and mail. Note: If the advertiser mentions more than one product, or if more than one ad appears on the page, write in the name of the product you are interested in.

**A** Page  
Air Brake Equipment ..... 4

**B**  
Bolts (Car, Timber, Hook, etc.) 66  
Books, Railroad ..... 65

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Centralized Traffic Control ..... 70  
Chemical Cleaner ..... 45  
Circuit Breakers ..... 9  
Control, Traffic (Centralized) ..... 70  
Cork Insulation (Freight Car) ..... 62  
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Diesel Locomotives ..... 47  
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Grade Crossings, Creosoted (Wood) ..... 53  
Guard Rail Bolt ..... 66  
(Continued third column reverse side)

**RAILWAY AGE**

July 30, 1951

Circled below are items on which I desire additional information.

Literature Only       Send Representative       Price Data

Pages Numbered:

1 2 3 4 6 9 10 11 14 15 16 17 18 45 47 48 49  
50 53 55 57 62 64 65 66 68 69 70

Items Numbered:

359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375  
376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392  
393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409  
410 411 412 413

On pages....., I want data on .....only!  
product(s)

Name & Title .....

Company .....

Address .....

**BUSINESS REPLY CARD**  
First Class Permit No. 153 (Sec. 34.9, P.L.R.), New York, N.Y.

POSTAGE WILL BE PAID BY—

**RAILWAY AGE**

30 Church Street

Reader  
Service Dept.

New York 7, New York



## LITERATURE & PAMPHLETS

**385. Trap Doors & Retractable Steps**  
*O. M. Edwards Co., Inc.* Specifications and complete data on Edwards streamlined trap doors and retractable steps.

**386. Stokers and Blowers**  
*Read Standard Corp. (formerly Standard Stoker).* Literature and information on steam locomotive stokers, diesel locomotive blowers, automatic spreader stokers, and other locomotive equipment. Please specify.

**387. Reels**  
*Roll-A-Reel Corp.* Details available on the "Roll-A-Reel", useful for many purposes including wire, rope and cable.

**388. Circuit Breakers and Switches**  
*The Pyle-National Company.* Pytel Catalog. Bulletin 1150, gives complete listings for the many P-N products, including: plugs & receptacles, multi-vent air distribution, gyralites, etc.

**389. Cork Car Insulation**  
*Dednox Incorporated.* Detailed information on Dednox 60% cork insulation as used in freight car insulation.

**390. Tie Dowelling Machine**  
*Graham Tie Dowel Service Co.* Bulletin DM-1 describes tie dowelling machine for applying dowels into ends of ties.

**391. Flexible Shaft Equipment**  
*Franklin Railway Supply Co.* Catalogs and bulletins on: wire brushes, abrasive and grinding attachments, buffing and rubbing attachments, rotary files and cutters, single and three-speed countershaft and 4-speed "Strandflex" gear type flexible shaft equipment. Please specify.

**392. Vibration Controls**  
*Lord Manufacturing Company.* Two items of special interest to designers and engineers: National Frequency Chart and Vibration Isolation Chart.

**393. Fire Protection Equipment**  
*C-O-Two Fire Equipment Co.* Complete free information on the C-O-Two line of fire protection equipment of all types.

**394. Rust Preventative Coating**  
*J. W. Mortell Co.* Literature on the Mortex #4 rust preventative coating for roofs, interiors and underframes of steel freight and refrigerator cars and hopper cars.

**395. Tank Car Cartoon Ad**  
*General American Transportation Corp.* The series of GATX tank car cartoon advertisements as they have run in RAILWAY AGE available for use in shops.

**396. Journal Box Visualizer**  
*Hyatt Bearings Div. General Motors Corp.* Simple plastic journal box visualizer shows ease of maintenance of Hyatt journal boxes.

**397. Fasteners**  
*The Lamson & Sessions Company.* Booklet "Railroad Engineered Fasteners" gives information on the L & S line of fasteners.

**398. Automatic Slack Adjuster**  
*Westinghouse Air Brake Co.* Descriptive leaflet 2468 describes the Type D pneumatic automatic slack adjuster for freight cars.

**399. Cross-tie Process**  
*Vapor-Drying Div. Taylor-Colquitt Co.* The complete story of the Vapor-Drying process; also, reprints of three ads in a series on economic aspects of this process. Please specify.

**400. Petroleum Products**  
*Standard Oil Company of California.* Additional information on the RPM Delo Oil R.R. or any other petroleum product available.

**401. Automatically Operated Grade Crossing Signals**  
*Western Railroad Supply Company.* Brochure 748 RA-6 "Grade Crossing Safety is Your Business" explains Western's model 10 automatically operated crossing signals.

**402. Temperature Control**  
*Minneapolis-Honeywell Regulator Co.* Information on Honeywell's electric, electric and pneumatic controls for heating and air conditioning in stations, shops, offices and other buildings. Please specify.

**403. Dictating Machine**  
*Thomas A. Edison, Inc.* New descriptive booklet, "Line on Televoice" describes Televoicewriter—the new dictating instrument.

**404. Wrought Iron For Blast Plates**  
*A. M. Byers Company.* Bulletin "Wrought Iron For Bridge Construction" gives helpful information on use of wrought iron for blast plates.

**405. Composite Air Brake Equipment**  
*Westinghouse Air Brake Co.* Catalog No. 2058 gives details of various combinations with 24-RL composite brake equipment.

**406. Locomotive Cranes**  
*American Hoist & Derrick Co.* Literature on American Dielectric Locomotive Cranes.

**407. Unicel Freight Car**  
*Pressed Steel Car Co., Inc.* Booklet "Unicel—he Freight Car of The Future—Today" gives the complete story of the Unicel combination box and refrigerator car.

**408. Automatic End Door Operators**  
*National Pneumatic Co., Inc.* Bulletin #1063 gives full details of the NP Automatic End Door Operators.

**409. Crib Cleaner**  
*Railway Maintenance Corporation.* Complete information available on the McWilliams Crib Cleaner, the one-man crib cleaner and excavator.

**410. Waterproof End Seal for Cable Terminals**  
*The Okonite Company.* Bulletin RA-2091 gives complete details on the Okoprene End Seal, the new cable terminal waterproofing seal.

**411. Mule-Hide Roofing**  
*The Lehon Company.* Booklet "Mule-Hide Cold Process Built-Up Roofing" gives complete details and specifications for laying these cold process Mule-Hide roofs.

**412. Electric Typewriters**  
*Remington Rand Inc.* Folder RE 8354 completely describes the new Remington Electri-economy Typewriter.

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July 30, 1951

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cago. His subsequent assignments were all in Chicago. He was appointed assistant general freight agent in February 1950, the position he held before his latest appointment.

**H. E. Abell**, traveling agent for the CHICAGO & NORTH WESTERN at Tulsa, Okla., has been appointed general agent of the road's Houston, Tex., office.

**Harold J. Kuhns**, general cashier for the RAILWAY EXPRESS AGENCY at Chicago, has been appointed general agent at Milwaukee.

**B. L. Wright**, assistant general passenger agent of the CHICAGO & EASTERN ILLINOIS, has retired after 28 years' service with that road.

**P. E. Croghan**, export-import agent of the CANADIAN PACIFIC at Montreal, has been appointed foreign freight agent at Boston, effective August 1, succeeding **B. A. Scott**, who has been transferred to New York, replacing **Walter Chudleigh**, retired.

**Russell E. Lewis**, who has been promoted to general freight agent of the TENNESSEE, ALABAMA & GEORGIA, at Chattanooga, Tenn. (*Railway Age*, July 2), was born at Tuscaloosa, Ala., February 11, 1907. Mr. Lewis attended Tuscaloosa Business College and later took extension courses from the University of Alabama. He entered railroad service in March 1930 on the Missouri-Kansas-Texas at Birmingham. In 1941, he opened a commercial office for the T.A.&G. at Birmingham, and served as commercial agent there until his promotion to general freight agent.

**E. H. Moot**, general passenger agent of the GREAT NORTHERN at Chicago, will retire July 31. Promoted to take charge of the Chicago passenger department, succeeding Mr. Moot, is **A. A. Hughes**, general agent, passenger department, who will become assistant general passenger agent. **A. L. Johnston**, general passenger agent, has been appointed assistant passenger traffic manager, at St. Paul, effective August 1. **S. M. Farrell**, assistant general passenger agent, becomes Mr. Johnston's successor. **C. M. Cornelius**, assistant to the passenger traffic manager, replaces Mr. Farrell, and is in turn succeeded by **E. H. Beckford**, chief clerk.

Mr. Moot, who has served the G. N. at Chicago nearly 54 years, started with the road as a messenger boy in the freight department, subsequently progressed through a number of positions, and in 1906 became district passenger agent. He was appointed general agent, passenger department, in 1920, and general passenger agent in 1946.

Mr. Johnston joined the G.N.'s passenger department at Winnipeg in 1918. He has been headquartered at St. Paul

since 1921, acting successively as traveling passenger agent, city passenger agent, general agent, assistant general passenger agent and general passenger agent.

Also joining the G.N. at Winnipeg, in 1916, Mr. Farrell moved to Chicago in 1924 and held various positions in the passenger department before his transfer to St. Paul in 1948.

the North Florida division at Jacksonville, to replace **C. H. Burks**, resigned.

**Charles M. Chumley**, engineer, maintenance of way, of the ILLINOIS CENTRAL, who retired July 1 after 48 years' service (*Railway Age*, July 2), was born at Union City, Tenn., on May 21, 1882. Beginning his career

## MECHANICAL

**O. R. Pendy**, master mechanic of the NEW YORK, CHICAGO & ST. LOUIS at Conneaut, Ohio, has been promoted to chief mechanical officer at Cleveland, succeeding the late **Thomas C. Shortt**, whose death was reported in *Railway Age* July 2. **John E. Kloss**, supervisor of diesel and motor equipment, has been appointed assistant to chief mechanical officer, with headquarters as before at Cleveland, succeeding **Ralph J. Hughes**, who has



O. R. Pendy

been appointed master mechanic at Conneaut. Mr. Pendy received his railway mechanical engineering degree from Pennsylvania State College in 1924 and joined the Nickel Plate that same year as special apprentice at Conneaut. He served as assistant to chief mechanical officer at Cleveland from 1945 to October 1, 1948, when he returned to Conneaut as master mechanic.

## ENGINEERING AND SIGNALING

**L. V. Johnson**, district engineer for the MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE, has been appointed chief engineer, with headquarters as before at Minneapolis. He succeeds **T. Z. Krumm**, who is retiring after 51 years' service.

**J. R. Alcorn**, senior assistant engineer of the North Florida division of the SEABOARD AIR LINE at Jacksonville, has been appointed division engineer of the Alabama division at Americus, Ga., succeeding **W. R. Fudge**, who has been transferred to



Charles M. Chumley

in the I.C.'s bridge and building department, Mr. Chumley became division engineer in 1902, later held that position at several points, and in 1937, as district engineer, moved to Memphis. He was promoted to engineer, maintenance of way, in June 1941.

## SPECIAL

**B. N. Lewis**, assistant superintendent of yards of the PULLMAN COMPANY, has been appointed supervisor, personnel administration, as part of the company's newly established employee relations department.

**G. K. Nield**, assistant public relations officer of the CANADIAN PACIFIC, has been appointed public relations officer, with headquarters as before at London, England, succeeding **C. W. Stokes**, who will retire on August 1, after 44 years of service.

## OBITUARY

**Harry Warner**, whose retirement as general agent of the RUTLAND at Chicago was reported in the *Railway Age* of April 2, died on July 16.

**John C. Otteson**, who retired in August 1928 as vice-president, secretary and treasurer of the WABASH at New York, after 52 years of service with that road and its predecessors, died on July 23 at his home in Brooklyn, N. Y.

**Arthur H. Rice**, 77, who retired in December 1948 as signal engineer and superintendent of telegraph of the DELAWARE & HUDSON at Albany, N. Y., died on July 18 at his home in that city.

## FREIGHT CAR "INSULATION"—6 Months Old

Shown below is an unretouched photo of a freight-car "insulation" material six months after application in a new car. Car roof corrosion started with the water in the material when applied. It fails on the most important functions of car roof insulation: Preventing condensation and protecting the roof.



## DEDNOX (60% CORK) INSULATION—14 Years Old

Dednox 60% Cork Insulation, since it contains no water, coal tar or toxic solvents, is in excellent condition 14 years after application. Further, it insulates to prevent condensation in car roofs; it waterproofs and adheres to protect against corrosion of roof wood or metal; it will not run or slide off at any temperatures up to 300° F.; and Dednox shrinks  $\frac{3}{8}$  less in drying than emulsion-type coatings.

Write for facts on Dednox economy and efficiency for all your freight cars.



DEDNOX was the first successful car insulation. It is made from highest quality cutback asphalt, containing at least 60% by volume cork granules. Its K-Factor (heat transmission rate) is .36.



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## Current Publications

### FILMS & FILM CATALOGS

*The Song of Mid-America*, 16-mm., color, sound. 45 min. Produced for the Illinois Central by Jerry Fairbanks, Inc., Hollywood, Cal. Available for showings to schools, clubs and other groups free through local I. C. representatives.

One of the highlights of the Illinois Central's centennial celebration last February was the musical revue produced by Helen Tieken Geraghty for the centennial dinner on February 16. "The Song of Mid-America" is a special film adaptation of this centennial dinner revue. Portrayed in story and song are the I. C.'s incorporation in 1851; the recruiting of workers and settlers; the difficulties encountered in construction and the rejoicing with which the completion of the charter lines was received; the Civil War; the subsequent linking of the northern and southern rail lines; the development of refrigerator cars for perishable freight; mining and the uses of coal; the role of the I. C. in World War II, and the work of men who run the railroad. Trade with Latin America is also stressed, with scenes depicting importation of bananas and other tropical fruits carried out as a dance sequence.

*Sound Slidesfilm Guide and Complete Source List*, prepared by the editors of *Business Screen*. 64 pages. Published by Operadio Manufacturing Company, St. Charles, Ill. \$1.

A comprehensive listing of over 1,000 available sound slide-films. It features an alphabetical title index, a list of over 150 sources from which the films may be obtained, and descriptive commentary on each film. It indicates whether the film is available for sale, rent, or loan and gives the prices or rental costs. The films are listed by subjects, which include agriculture, industrial relations, supervisory training, industries, safety education, farm, home and traffic safety, health and hygiene, sales training, and management.

### TRADE PUBLICATIONS

*Catalog of radio, television, sound and industrial electronic equipment*. 1,053 pages, illustrations. Dep't. RA, Milo Radio & Electronics Corp., 200 Greenwich st., New York 7. Free, to authorized purchasing agents writing on company letterhead and stating official capacity.

Listing products of major radio-electronic equipment manufacturers in the United States, complete with prices and discounts, this catalog is intended to serve as a ready-reference buying guide for purchasing officers seeking a fast and dependable source of supply.

*How to Improve Your Wood Finishing*. 4 pages, illustrations. Sundstrand Machine Tool Company, Pneumatic division, Rockford, Ill.

This manual gives, in photo-caption (Continued on page 64)

## OPERATING REVENUES AND OPERATING EXPENSES OF CLASS I STEAM RAILWAYS

Compiled from 127 monthly reports of revenues and expenses representing 131 Class I steam railways

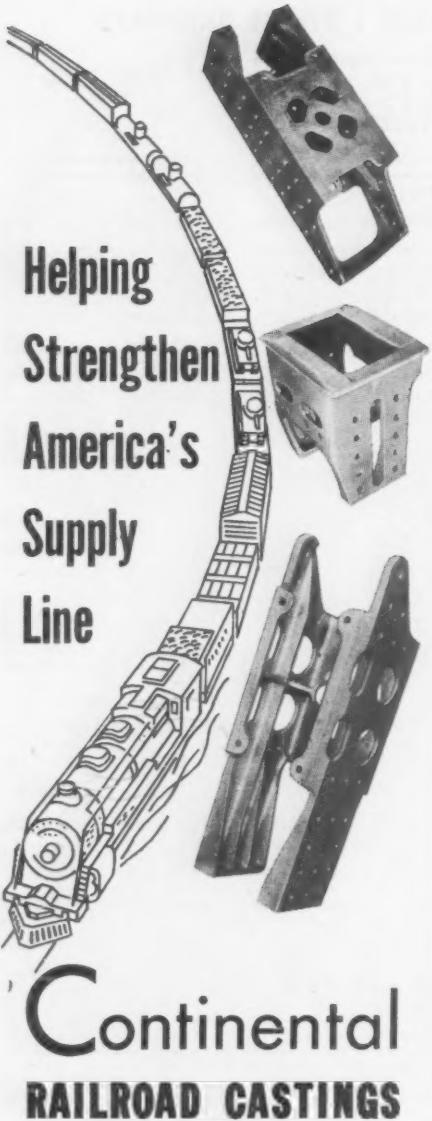
*(Switching and Terminal Companies Not Included)*

### FOR THE MONTH OF APRIL 1951 AND 1950

Item	United States		Eastern District		Southern District		Western District	
	1951	1950	1951	1950	1951	1950	1951	1950
Miles of road operated at close of month	225,951	226,489	53,300	53,348	45,957	46,136	126,694	127,005
Revenues:								
Freight	\$722,011,559	\$601,800,806	\$264,726,721	\$234,242,920	\$151,541,859	\$131,120,335	\$305,742,979	\$236,437,551
Passenger	66,762,039	60,554,775	34,581,040	33,084,702	11,034,151	9,805,644	21,146,848	17,664,429
Mail	20,833,536	18,733,428	7,911,676	6,811,630	3,528,425	3,340,119	9,393,435	8,581,679
Express	6,498,396	5,143,591	2,136,068	1,337,954	1,059,147	1,068,697	3,303,181	2,736,940
All other operating revenues	35,339,171	27,587,497	15,678,846	12,561,978	6,592,735	5,151,197	13,067,590	9,874,322
Railway operating revenues	851,444,701	713,820,097	325,034,351	288,039,184	173,756,317	150,485,992	352,654,033	275,294,921
Expenses:								
Maintenance of way and structures	122,819,325	103,557,613	43,317,445	35,694,277	26,991,790	21,656,140	52,510,090	46,207,196
Depreciation	11,137,413	10,828,029	4,606,325	4,506,194	2,059,180	1,978,682	4,471,908	4,343,153
Retirements	1,406,245	990,229	365,180	443,789	129,493	185,424	911,572	361,016
Deferred maintenance	*156,497	*341,456	*155,328	*270,576	*1,169	*14,102	.....	*56,778
Amortization of defense projects	124,266	145,061	12,473	15,943	31,359	46,388	80,434	82,730
Equalization	101,604	*1,296,714	*372,833	*740,483	981,441	265,168	*507,004	*821,399
All other	110,206,294	93,232,464	38,861,628	31,739,410	23,791,486	19,194,580	47,553,180	42,298,474
Maintenance of equipment	167,227,633	135,928,546	70,593,183	57,818,734	32,585,753	26,667,238	64,048,697	51,442,574
Depreciation	25,823,524	24,205,543	9,427,695	8,805,688	5,853,107	5,508,934	10,542,722	9,890,921
Retirements	*310,357	*24,821	*222,292	*5,185	*50,777	5,657	*37,288	*25,293
Deferred maintenance and major repairs	*2,366,338	*777,654	*2,347,441	*744,053	*1,897	*4,589	*17,000	*29,012
Amortization of defense projects	3,537,347	1,221,903	1,779,730	451,497	587,541	238,478	1,170,076	531,928
Equalization	*579,722	516,096	*4,272	36,033	281,682	137,039	*857,132	343,024
All other	141,123,179	110,787,479	61,959,763	49,274,754	25,916,097	20,781,719	53,247,319	40,731,006
Traffic	17,827,213	15,809,390	5,825,974	5,116,172	3,725,877	3,373,699	8,248,362	7,319,519
Transportation—Rail line	325,571,077	276,402,117	135,644,151	119,500,693	59,630,076	52,517,372	130,296,850	104,384,052
Miscellaneous operations	9,818,856	8,454,581	3,443,226	3,136,517	1,680,761	1,411,615	4,694,869	3,906,449
General	25,586,191	22,472,989	9,933,681	8,895,993	5,446,696	4,658,870	10,205,814	8,918,126
Railway operating expenses	668,850,295	562,625,236	268,784,660	230,162,386	130,060,953	110,284,934	270,004,682	222,177,916
Net revenue from railway operations	182,594,406	151,194,861	56,249,691	57,876,798	43,695,364	40,201,058	82,649,351	53,117,005
Railway tax accruals	92,801,386	74,201,684	27,886,577	26,094,667	24,339,457	20,059,339	40,575,352	28,047,678
Pay-roll taxes	23,920,030	20,722,578	9,825,348	8,591,542	4,536,350	4,001,869	9,558,332	8,129,167
Federal income taxes†	39,824,765	26,676,137	7,889,955	8,039,402	13,437,779	10,057,126	18,497,031	8,579,609
All other taxes	29,056,591	26,802,969	10,171,274	9,463,723	6,365,328	6,000,344	12,519,989	11,338,902
Railway operating income	89,793,020	76,993,177	28,363,114	31,782,131	19,355,907	20,141,719	42,073,999	25,069,327
Equipment rents—Dr. balance	15,681,191	11,644,149	6,316,790	5,579,900	712,628	*722,536	8,651,773	6,786,785
Joint facility rents—Dr. balance	3,517,261	3,188,151	1,633,829	1,471,704	488,032	500,373	1,395,400	1,216,074
Net railway operating income	70,594,568	62,160,877	20,412,495	24,730,527	18,155,247	20,363,882	32,026,826	17,066,468
Ratio of expenses to revenues (percent)	78.6	78.8	82.7	79.9	74.9	73.3	76.6	80.7

### FOR THE FOUR MONTHS ENDED WTH APRIL 1951 AND 1950

Item	United States		Eastern District		Southern District		Western District	
	1951	1950	1951	1950	1951	1950	1951	1950
Miles of road operated at close of month	226,018	226,596	53,305	53,366	45,957	46,144	126,756	127,086
Revenues:								
Freight	\$2,772,905,385	\$2,251,646,667	\$1,026,466,376	\$849,528,210	\$595,201,498	\$481,875,306	\$1,151,237,511	\$920,243,151
Passenger	279,325,356	247,680,680	141,340,309	132,950,153	48,386,905	42,046,314	89,598,142	72,684,213
Mail	80,014,562	71,469,412	31,051,501	26,302,505	13,335,147	12,490,596	35,627,914	32,676,311
Express	22,999,011	19,876,272	6,529,511	5,590,859	4,515,276	4,515,399	11,954,224	9,770,014
All other operating revenues	136,163,012	108,445,434	61,370,112	48,519,767	24,791,879	19,166,434	50,001,021	40,759,233
Railway operating revenues	3,291,407,326	2,699,118,465	1,266,757,809	1,062,891,494	686,230,705	560,094,049	1,338,418,812	1,076,132,922
Expenses:								
Maintenance of way and structures	452,420,718	378,505,883	160,642,761	130,090,849	104,229,522	84,779,950	187,548,435	163,635,084
Depreciation	44,451,961	43,118,871	18,376,917	18,015,278	8,235,788	7,745,249	17,839,256	17,358,344
Retirements	4,207,434	3,025,479	1,452,161	851,106	538,786	735,210	2,216,487	1,439,163
Deferred maintenance	*753,010	*994,293	*746,536	*800,000	*6,474	*32,815	.....	*161,478
Amortization of defense projects	566,067	606,427	51,736	73,812	134,322	185,483	380,009	347,132
Equalization	15,476,095	15,672,452	6,480,783	8,038,119	6,552,844	5,724,698	2,442,468	1,909,635
All other	388,472,171	317,076,947	135,027,700	103,912,534	88,774,256	70,422,125	164,670,215	142,742,288
Maintenance of equipment	647,184,423	527,351,625	272,086,122	217,099,253	127,394,963	103,383,453	247,703,338	206,868,919
Depreciation	101,688,825	96,467,990	36,872,268	35,597,297	22,974,919	21,735,333	41,841,638	39,135,360
Retirements	*1,185,714	*168,066	*669,105	*21,702	*371,862	*77,207	*144,747	*69,177
Deferred maintenance and major repairs	*9,135,220	*8,542,180	*9,033,967	*8,309,210	*8,696	*21,453	*92,557	*211,517
Amortization of defense projects	11,062,124	4,889,647	3,729,824	1,806,056	1,830,519	954,011	5,501,781	2,129,580
Equalization	*1,101,242	119,068	*20,789	119,421	1,088,955	1,060,825	*2,169,406	*1,061,178
All other	545,855,650	434,585,186	241,207,891	187,907,391	101,881,128	79,731,944	202,766,631	166,945,851
Traffic	69,388,249	63,212,439	23,138,719	21,358,994	14,759,141	13,289,358	31,490,389	28,564,087
Transportation—Rail line	1,294,851,397	1,091,747,769	550,771,414	466,392,490	238,066,413	203,042,814	506,013,570	422,312,465
Miscellaneous operations	40,078,153	34,954,289	14,311,471	13,096,900	6,661,448	5,720,421	19,105,234	16,136,968
General	99,896,038	89,039,984	38,403,972	34,456,975	21,424,487	18,931,629	40,067,579	35,651,380
Railway operating expenses	2,603,818,978	2,184,811,989	1,059,354,459	882,495,461	512,535,974	429,147,625	1,031,928,545	873,168,903
Net revenue from railway operations	687,588,348	514,306,476	207,403,350	180,396,033	173,694,731	130,946,424	306,490,267	202,964,019
Railway tax accruals	375,073,455	273,060,069	113,326,505	92,945,228	62,240,603	66,249,379	167,526,347	113,865,462
Pay-roll taxes	93,229,130	81,327,960	38,556,456	33,212,936	17,958,215	15,544,585	36,714,459	32,570,439
Federal income taxes†	166,123,877	84,581,106	33,111,693	21,091,980	51,215,589	27,497,614	81,796,595	35,991,512
All other taxes	115,720,448	107,151,003	41,658,356	38,640,312	25,046,799	23,207,180	49,015,293	45,303,511
Railway operating income	312,514,893	241,246,407	94,076,845	87,450,805	79,474,128	64,697,045	138,963,920	89,098,557
Equipment rents—Dr. balance	52,458,932	42,283,598	24,68					



**Helping  
Strengthen  
America's  
Supply  
Line**

**Continental**  
**RAILROAD CASTINGS**

In dozens of locomotive and car applications, Continental Railroad Castings are helping strengthen America's supply line by providing long, trouble-free service, with important savings on initial cost. Made of mild alloy steel, these castings are heat treated to give the highest physical properties—without costly additives. Continental's specialized foundry facilities assure "custom" precision with any size casting, any analysis.



**Continental**  
**FOUNDRY & MACHINE CO.**

CHICAGO • PITTSBURGH

Plants at:  
East Chicago, Ind., Wheeling, W. Va., Pittsburgh, Pa.

(Continued from page 62)  
form, a detailed analysis of five steps commonly employed in wood sanding, including details as to abrasive paper, grit specifications, type of pad to use, when and how to use sander with or across grain, etc.

#### BOOK

*Heating, Ventilating, Air Conditioning Guide, 1951.* American Society of Heating and Ventilating Engineers, 51 Madison Ave., New York 10. \$7.50.

Contains a technical data section of reference material on design and specification of heating, ventilating and air conditioning systems based on the Transactions, the investigations of the research laboratory and cooperating institutions, and the practice of members and friends of the society; a manufacturers' catalog data section which includes essential and reliable information concerning modern equipment; and complete indexes to technical and catalog data sections.

#### PERIODICAL

*Defense Production Record, Vol. 1, No. 1, May 3, 1951.* Edited and published for the Defense Production Administration by the Office of Public Information of the National Production Authority, U. S. Department of Commerce. Available from the Government Printing Office, Washington 25, D.C. Single copies, 5 cents; annual subscription, \$2.50.

The purpose of the Defense Production Record is to provide a concise, explanatory record of all official actions of the Defense Production Administration and related federal agencies; to interpret and explain the need for and purpose of such official actions; and to present such other factual information relating to defense production activities as may be of significance and service to the business community, all pursuant to Section 701 (b) of the Defense Production Act of 1950. Its objective is to transmit this information to the business community primarily through established media of communication.

#### PAMPHLETS

*The Vacation Travel Market of the United States.* 99 pages, charts, maps. Curtis Publishing Company, Philadelphia 5. Free.

This is the second of Curtis' nationwide studies on the vacation travel market of the United States. It has been made not only to measure the size, pattern and characteristics of the vacation travel market, but also to provide industry and organizations with data which will permit them to direct their selling and advertising efforts to the most profitable segments of this rapidly expanding market.

*To Speed Your Ore Through Baltimore.* 8 pages, illustrations. Baltimore & Ohio Railroad Company, Baltimore 1. Free.

A brief description of the recently completed import ore facility at Curtis Bay, Baltimore. Costing upwards of \$5,000,000,

it is the first of its kind to be built on the eastern seaboard. With a pier 650 feet in length, and two ore unloading machines of the man-trolley type, the facility operates at amazing speed and efficiency, with a present rated capacity of approximately 3,000 tons an hour. However, when the pier is extended to its full length, with two additional unloaders, the handling capacity will be doubled, and two ore ships can then be worked at once. (*Railway Age*, July 2, page 36.)

*Intercity Bus Operations, 1950.* Statistical Service Bulletin, March 29, 1951. National Association of Motor Bus Operators, 839 17th St., N.W., Washington 6, D.C.

Reviews—motor bus traffic and earnings in 1950.

*Company-Union Agreement and Unilateral Pension Systems, Revised Edition.* 27 pages. Railroad Retirement Board, 844 Rush St., Chicago 11. Free.

Discusses pension coverage in the United States, rise of company-union agreement pension systems, inflation and pensions, and the social security amendments. Tables at the end list some of the important company-union agreement pension systems and a few important unilateral systems. Data given include coverage, age and service requirements for benefits, contributions, normal pension formula and vesting rights, disability pension formula, administration of plan and manner of financing.

*Proceedings of the Regional Transportation Conference at Oklahoma City, Okla., January 19-20, 1951.* 64 pages. Chamber of Commerce of the United States, Washington 6, D.C. \$1.

This conference was designed to acquaint those in attendance with emergency transportation matters, to provide an opportunity to exchange views on major transportation subjects, and to furnish the Transportation and Communication Committee of the national C. of C. with material and ideas for use in developing policy on vital national transportation issues. Among the speakers were Fred G. Gurley, Delos W. Rentzel, George H. Shafer, Charles L. Dearing, Homer King, D. P. Loomis and Sidney L. Miller. Mr. Shafer's address was abstracted in *Railway Age*, February 5, pages 48-50, and a brief account of the entire conference appeared on pages 62 and 63 of the same issue.

*Standards—Spearhead of Industrial Mobilization.* American Standards Association, 70 E. 45th St., New York 17. \$1.

Papers presented at the first national standardization conference sponsored by A. S. A. in November 1950 have been collected and published in this volume. During the conference, particular emphasis was placed on the crucial importance of standards to America's rearming. Spokesmen from industry, military and civilian agencies of the government, labor, and consumer groups laid out the pattern for meeting the challenge to production through standardization. They reported on standardization in national defense, in company operations, in procurement, in construction, and in safety.

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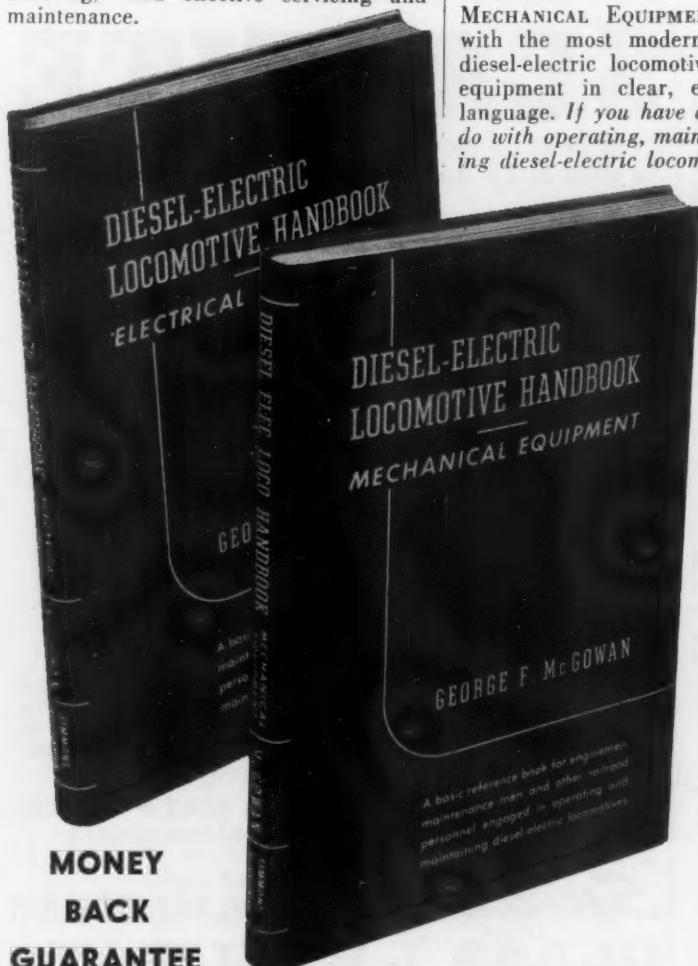
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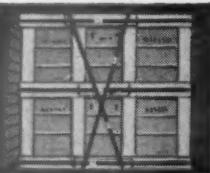
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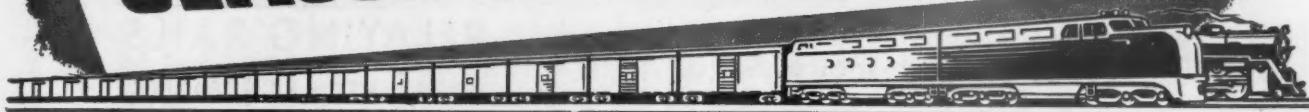
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